THE MOST RELIABLE CARS, SUVs & TRUCKS

BEST PET INSURANCE P. 40 • **THE RIGHT LIGHTS FOR EVERY ROOM** P. 34

CR Consumer Reports®

JANUARY 2024

RATINGS & REVIEWS

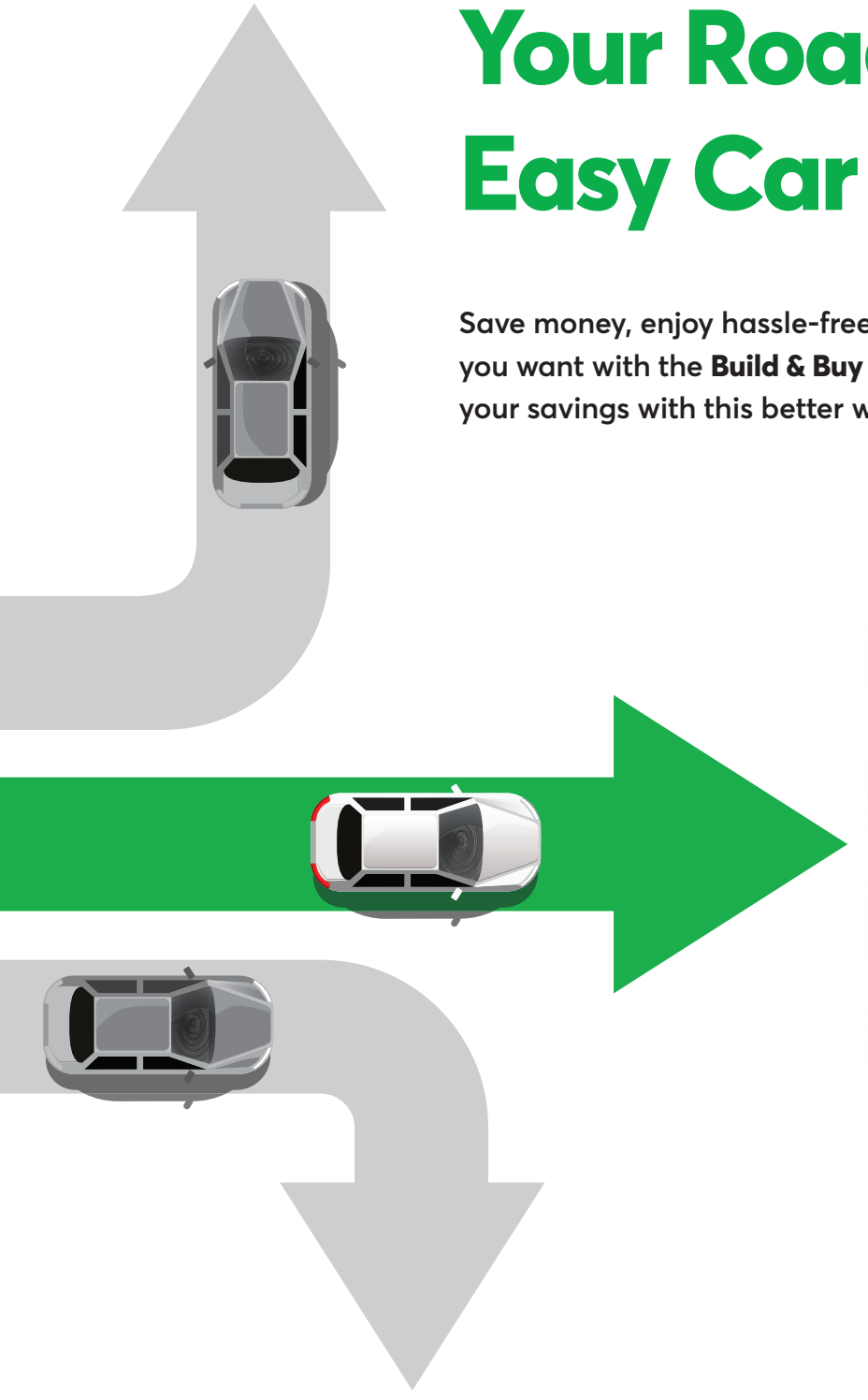
- Blood Pressure Monitors
- Toaster Ovens
- Cordless Vacuums
- Smart Speakers
- Glass Cleaners
- Door Locks

YOUR GUIDE TO

Better, Safer Drinking Water

Toxic chemicals and bacteria threaten our nation's tap water. Here's how to test yours, and clean it up.

Your Road Map to Easy Car Shopping



Save money, enjoy hassle-free shopping, and get the deal you want with the **Build & Buy Car Buying Service.** Lock up your savings with this better way to buy a car.

SEARCH for the car you want and see what others paid.

LOCATE the dealership from our prescreened network of over 15,000.

COMPARE real pricing from participating dealers.

SAVE and drive home in your new car.

cr.org/buildandbuy

CR

CRM41C2

Contents

JANUARY 2024, VOL. 89 NO. 1

P. **24**

What's in Your Water?
We tell you the harmful contaminants you should test for, and the best ways to clean up your water.

24 **CR's Guide to Better, Safer Drinking Water**
Here's how to test at home for lead, PFAS, and bacteria. Plus, the top filters for healthier, tastier drinking water.
RATINGS

34 **The Right Lights for Your Home**
Follow our expert tips for choosing LED bulbs that look good and last, and the fixtures that will brighten every room.

40 **Should You Get Pet Insurance?**
It's not always the solution to pricey vet bills. We have some numbers to help you decide–and a list of the best and worst insurance companies from our surveys.
RATINGS

44 **How to Choose a Good Olive Oil**
CR's food pros guide you through the many options on the market to discover great picks for drizzling, dipping, and cooking.
RATINGS

PRODUCTS RATED IN THIS ISSUE

TOASTER OVENS
P. 8

CORDLESS VACUUMS
P. 9

PAPER SHREDDERS
P. 15

BLOOD PRESSURE MONITORS
P. 18

SUBARU CROSSTREK
P. 57

PHOTOS, COVER: GETTY IMAGES. PHOTOS, THIS PAGE: DANIEL DE LA HOZ/GETTY IMAGES (WATER); SCOTT MEADOWS/CONSUMER REPORTS (BLOOD PRESSURE MONITOR)

Contents

Cars You Can Count On
See the vehicles that top our exclusive reliability surveys—and the ones that fall short.

P. **50**

DEPARTMENTS & COLUMNS

8 **What We're Testing in Our Labs ...**
Toaster ovens that double as air fryers, cordless vacuums, bathroom scales, and more.
RATINGS

10 **Ask Our Experts**
Advice on buying a used car with high mileage, insight on a new drug for Alzheimer's disease, and whether brown eggs are actually better for you.

P. **16**

11 **CR Insights**
The best glass cleaners, how to prevent frozen pipes, the top canned beans from our tests, and more.
RATINGS

PRODUCT UPDATE

18 **Why the Best Place to Check Blood Pressure May Be at Home**
How to use a home monitor to track your numbers–and easy ways to finally get your pressure under control.
RATINGS

IN EVERY ISSUE

4 **From the President: Your Safety Comes First**
CR is fighting to make cars, furniture, drinking water–and much more–safer for you and your family.

5 **Building a Better World, Together**
Keeping credit reports free, working to ban dangerous water beads, and protecting digital privacy.

6 **Your Feedback**
Readers' comments about our recent content.

17 **Recalls**

60 **Index**

61 **The Better Deal**

ROAD REPORT

49 **Ahead of the Curve**
Auto ratings, news, and advice.

50 **The Most (and Least) Reliable Cars**
Our annual survey reveals the autos with the most trouble-free performance–and those that are more likely to cause you problems.
RATINGS

56 **Get More From Your Motor Oil**
CR's experts help you choose the right oil for your vehicle.

57 **Road Test**
We rate the Subaru Crosstrek, Toyota Prius, Mercedes-Benz EQE SUV, and Mazda CX-90.
RATINGS

ABOUT CONSUMER REPORTS Consumer Reports is an independent, nonprofit organization founded in 1936 that works side by side with consumers to create a safe, fair, and transparent marketplace. To achieve our mission, we test thousands of products and services in our labs each year and survey hundreds of thousands of consumers about their experiences with products and services. We pay for all the products we rate. We don't accept paid advertising.

In addition to our rigorous research, investigative journalism, and consumer advocacy, we work with other organizations, including media, consumer groups, research and testing consortiums, and philanthropic partners. We also license our content and data, as well as work with business partners to offer shopping and other consumer services, and may receive fees from these programs. We maintain a strict separation between our commercial operations and our testing and editorial operations. Our testing and editorial teams decide which products to rate; our external business partners or other third parties do not dictate or control these decisions. Lastly, these partnerships and programs do not constitute CR's endorsement of any products or services.

For more information, go to **CR.org/about.**

HOW TO REACH US Write to us at Consumer Reports, 101 Truman Ave., Yonkers, NY 10703, Attn.: Member Support. Or call 800-333-0663.

TO SEND A LETTER TO THE EDITOR Go to **CR.org/lettertoeditor.**

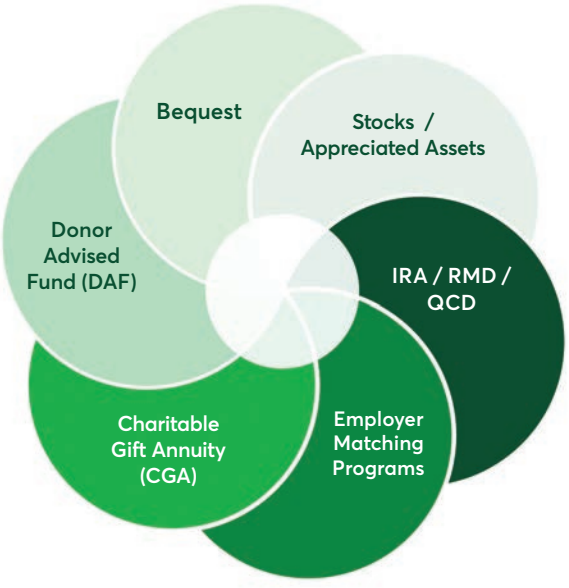
FOR NEWS TIPS & STORY IDEAS Go to **CR.org/tips.**

ACCOUNT INFORMATION Go to **CR.org/magazine** or call 800-333-0663. See page 3 for more details.

RATINGS Overall Scores are based on a scale of 0 to 100. We rate products using these symbols:

WORSE — BETTER

Smartest Ways to Give



Your philanthropic partnership with Consumer Reports helps to fund our mission, while reducing your tax liability.

- ☐ **Yes,** I would like to learn about securing guaranteed fixed-rate income for life by creating a CGA.
- ☐ **Yes,** I would like to discuss making a gift to CR in my will; making CR a beneficiary of my retirement or life insurance account; or making a donation of non-cash assets, such as stocks, real estate, donor advised funds, or IRA.
- ☐ **Yes,** I would like information on how to create a will for FREE.
- ☐ **Yes,** I have named Consumer Reports in my will or estate plans.

Name(s) _____

Address _____

_____

Email (required) _____

Phone _____

Return to: Consumer Reports, Planned Giving, 101 Truman Ave., Yonkers, NY 10703

legacy@consumer.org

877-275-3425

Consumer Reports is registered as a 501(C)(3) nonprofit organization. Contributions to Consumer Reports are tax-deductible to the extent permitted by law. Our U.S. tax identification number is 13-1776434.

CRM41ASN

CR Consumer Reports®

Member Support You can call us about your membership or donations at **800-333-0663**.

Or go to CR.org/magazine to • Renew or pay for your current magazine • Give a gift • Change your address • Report a delivery problem • Cancel your magazine

Or write to us: Consumer Reports Member Support
P.O. Box 2109, Harlan, IA 51593-0298
Please include or copy address label from issue.
(Allow four to six weeks for processing.)

Price In U.S., $6.99 per issue, special issues $7.99. In Canada, $7.99 CAN per issue, special issues $8.99 CAN (Goods and Services Tax included, GST #127047702). All other countries add $10 per year to the U.S. price for shipping and handling.

Back Issues Single copies of previous 12 issues, $8.99 each (includes shipping and handling). Please send payment to Consumer Reports, Attn.: Member Services, 101 Truman Ave., Yonkers, NY 10703. Other ways to get Consumer Reports on the go: Apple News+, Google Play, Kindle, Nook, Readly, and Zinio.

Permissions Reproduction of Consumer Reports in whole or in part is forbidden without prior written permission (and is never permitted for advertising purposes). For questions about noncommercial, educational/academic uses of our content, please submit requests to **CR.org/licensing.**

Mailing Lists We exchange or rent our print postal mailing list so that it can be provided to other publications, companies, and nonprofit organizations that offer products or services through direct mail. If you wish to have your name deleted from our list, please send your address label with a request for deletion from outside use to Consumer Reports, P.O. Box 2109, Harlan, IA 51593-0298, or you can go to CR.org and click on "Do Not Sell My Personal Information" at the bottom of the page. We do not exchange or rent email addresses. You can review our complete privacy policy regarding Consumer Reports information products, services, and programs at **CR.org/privacy.**

Consumer Reports (ISSN 0010-7174) is published monthly except for double issues in May/June and November/December by Consumer Reports Inc., 101 Truman Avenue, Yonkers, NY 10703. Periodicals postage paid at Yonkers, N.Y., and at other mailing offices; Canadian postage, at Mississauga, Ontario (Canadian publications registration number 2665247, agreement number 40015148). Title Consumer Reports is a federally registered trademark in the U.S. Patent and Trademark Office.

Contents of this issue copyright © 2024 by Consumer Reports, Inc. All rights reserved under international and Pan-American copyright conventions.

CR's No Commercial Use Policy To view the policy, go to **CR.org/nocommercialuse.**

Contributions Consumer Reports is an independent 501(c)(3) nonprofit organization that works side by side with consumers to create a fairer, safer, and healthier world. Contributions are tax-deductible in accordance with the law. Donations of commonly traded securities or real estate will be accepted and immediately converted to cash. For additional information, email **donorservices@cr.consumer.org.** To donate, please send your tax-deductible contribution to Consumer Reports, Attn.: Donor Services, 101 Truman Ave., Yonkers, NY 10703 or go to **CR.org/donate.**

Charitable Gift Annuity Establishing a Consumer Reports Charitable Gift Annuity is an ideal way to accomplish your personal financial goals while supporting the mission of Consumer Reports. For additional information, please contact us at 877-275-3425 or **legacy@consumer.org.**

Consumer Reports' Staff operates under contract between Consumer Reports and The NewsGuild of New York Local 31003, CWA.

Members Send address changes to Consumer Reports, P.O. Box 2109, Harlan, IA 51593-0298. If the post office alerts us that your magazines are undeliverable, we have no further obligation to fulfill your magazines unless we have a corrected address within two years.

POSTMASTER Send all UAA to CFS (see DMM 507.1.5.2).

NON-POSTAL AND MILITARY FACILITIES Send address corrections to Consumer Reports, P.O. Box 2109, Harlan, IA 51593-0298.

CANADA POST If copies are undeliverable, return to Consumer Reports, P.O. Box 481, STN MAIN, Markham, ON L3P 0C4.

Consumer Reports is a member of Consumers International, a federation of more than 220 consumer organizations from more than 115 countries working to protect and empower consumers throughout the world. For information, go to **consumersinternational.org.**

Please Remember CR in Your Will For information about how to make a bequest to Consumer Reports, please contact us at 877-275-3425 or **legacy@consumer.org.**

Your Safety Comes First

AS 2024 ARRIVES, we turn to our list of commitments in the new year. At CR, that list begins with safety. Whether it's your tap water, your children's toys, or the car you count on every day, you and your family's safety shouldn't be taken for granted.

That's why CR is dedicated to providing you with trusted information on safety. In September, for example, we moved swiftly to raise the alarm about "water beads," colorful gel balls sold as toys that can be deadly to children and have sent thousands to emergency rooms after being swallowed or inhaled. (Learn more about CR's push to have them banned as toys, on page 5.) And this month's cover story, "CR's Guide to Better, Safer Drinking Water," on page 24, is part of our ongoing series of investigations on drinking water in the U.S. It reveals the dangers lurking in our water, how to test it in your own home, and the steps to take to make it safer.

But CR is most effective when we work hand in hand with consumers, as we did in our campaign to prevent furniture tip-overs, which send an estimated 7,200 children to ERs each year. Our years of efforts with parents culminated in the Stop Tip-overs of Unstable, Risky Dressers on Youth (STURDY) Act, a law that led to the first mandatory stability standard for dressers and similar furniture, which took effect last September and will save many lives in the future.

This year, we'll expand on these initiatives for a safer marketplace. CR will continue to fight (with your help) to keep our food and water safe. We'll investigate the cyber and data security risks of digital financial tools, such as banking apps. And we'll push auto companies to make car safety features, including automatic crash notification, standard equipment on all cars—because your safety isn't a luxury.

Your voice helps us realize this mission. I hope you'll join others who want to make our lives safer by going to **action.consumerreports.org**.

Marta Tellado

Marta L. Tellado,
President and CEO
Follow me on Twitter
@MLTellado

CR Consumer Reports®

President and CEO Marta L. Tellado

Acting Head of Content Jen Shecter
Editorial Director, Print Ellen Kunes

Deputy Editors, Print Amanda Lecky, Diane Umansky, Natalie van der Meer
Design Director Mike Smith **Creative Director, Brand** Young Kim
Manager, Design Ewelina Mrowiec
Art Directors Tammy Morton Fernandez, Lisa Slater, Pete Sucheski
Visual Editors Lacey Browne, Emilie Harjes, Kathryn Marx

Senior Director, Product Testing Maria Rerecich
Director, Lab Operations Jason Holmes
Senior Director, Content Strategy Glenn Derene
Associate General Counsel Camille Calman

CARS: Kevin Doyle, Content Lead ***Editors/Writers:*** Keith Barry, Jeff S. Bartlett, Jonathan Linkov, Mike Monticello, Benjamin Preston ***Auto Test Center:*** Jake Fisher, Senior Director; Jennifer Stockburger, Director ***Product Testing:*** Michael Bloch, Michael Crossen, Steve Elek, Kelly Funkhouser, Gordon Gingras, John Ibbotson, Alex Knizek, Anita Lam, Maddie McCarty, Ryan Pszczolkowski, Mike Quincy, Gabriel Shenhar, Kassidy Simpson, Shawn Sinclair, Emily A. Thomas, Joe Veselak, Justin Walters ***Policy Lead:*** William Wallace

HEALTH & FOOD: Lauren F. Friedman, Content Lead ***Editors/Writers:*** Trisha Calvo, Kevin Loria, Catherine Roberts ***Policy Lead:*** Brian Ronholm

HOME & APPLIANCE: Sara Morrow, Content Lead ***Editors/Writers:*** Molly Guinn Bradley, Joanne Chen, Tanya A. Christian, Mary Farrell, Keith Flamer, Paul Hope, Deb Silber, Tobie Stanger, Daniel Wroclawski ***Product Testing:*** John Galeotafiore, James Nanni, Testing Leads; John Banta, Sarah Bogdan, Susan Booth, Tara Casaregola, Lawrence Ciufo, Bernard Deitrick, Cindy Fisher, Paolo Fu, Kathleen Halevah, Rich Handel, Misha Kollontai, Ginny Lui, Joan Muratore, Christopher Regan, Matt Schimmenti, Frank Spinelli, Kenneth Sutton, Dave Trezza ***Market Analysts:*** Mark Allwood, Stacy Canova-Turner, Kelly Moomey, Courtney Pennicooke, Antonella Pomilla, Marion Wilson-Spencer ***Policy Lead:*** William Wallace

MONEY: ***Editor:*** Margot Gilman ***Policy Lead:*** Delicia Hand

TECH: Jerry Beilinson, Content Lead ***Editors/Writers:*** Nicholas De Leon, Chris Raymond, Allen St. John, James K. Willcox ***Product Testing:*** Richard Fisco, Glen Rockford, Michael Visconti, Testing Leads; Elias Arias, Antonette Asedillo, Steve Blair, Claudio Ciacci, Charles Davidman, David DellaRocca, Henry Parra, Justin Stewart, Richard Sulin, Maurice Wynn ***Market Analysts:*** Min Kim Bryant, César Carroll, Odalys Grieco, Nish Suvarnakar ***Policy Lead:*** Justin Brookman

SPECIAL PROJECTS: ***Director:*** Joel Keehn ***Associate Director:*** Margot Gilman ***Editors/Writers:*** Lisa L. Gill, Lauren Kirchner, Scott Medintz, Brian Vines

Content Operations Robert Kanell, Director
Copy Editing Leslie Monthan, Copy Chief; Noreen Browne, Alison France, Wendy Greenfield
Fact Checking & Research Tracy Anderman, Manager; Joy Crane, Sarah Goralski, Christine Gordon, Lucy Huang, Karen Jacob
Planning & Production Nancy Crowfoot, Associate Director; Eric Norlander, Manager; Letitia Hughes, Terri Kazin, Aileen McCluskey
Premedia William Breglio, Associate Director; Eugene Chin, Anthony Terzo

Photography Scott Meadows, John Powers
Imaging Francisco Collado

Audience Expansion David Schipper, Associate Director; Ginger Cowles, Managing Editor; Lisa Fogarty, Angela Lashbrook, Jodhaira Rodriguez, Writers; José Amézquita, Product Tester
Diverse Audience Strategy Elena Chavez, Director; Althea Chang-Cook, Associate Director

Product Sustainability Shanika Whitehurst, Associate Director
Food Safety James E. Rogers, Director; Tunde Akinleye, Eric Boring, Amy Keating, Sana Mujahid
Product Safety Ashita Kapoor, Associate Director; Juan A. Arguello

Consumer Engagement Testing Charu Ahuja, Director; Linda Greene, Dana Keester, Paul Ritchey
Statistics & Data Science Jody Porrazzo, Director; Debasmita Das, Kristen Dorrell, Dina Haner, Keith Newsom-Stewart
Survey Research Debra Kalensky, Associate Director; Noemi Altman, Dave Gopoian, Kendra Johnson, Martin Lachter, Adam Troy, Tian Wang, Tess Yanisch

Consumer Insight Frank Yang, Associate Director; Ipsita Arora
Member Support Sue Melfi, Director; Donna Murianka
Marketing Dawn Nelson, Senior Director
Print Supply Chain Steven Schiavone, Director
Administration Dawn Yancy Elleby

EXECUTIVE TEAM: VP, Chief People Officer Genea O. Bell; **SVP, Chief Strategy Officer** Jessica Freireich; **VP, General Counsel & Chief of Staff** Michael Hubner; **SVP, Chief Membership Officer** Lauren Stanich; **VP, Chief Social Impact Officer** Sharee McKenzie Taylor; **SVP, Chief Financial Officer** Eric Wayne
VICE PRESIDENTS: Financial Planning & Analysis JoAnne Boyd; **Chief Experience Officer** Yana Bulva; **New Products & Services** Esther Han; **Testing & Insights** Lilian Kayizzi; **Innovation Lab** Ben Moskowitz; **Chief Research & Analytics Officer** Kristen Purcell

PHOTO: VICTORIA WILL

Keeping Credit Reports Free

In September, the nation's three biggest credit bureaus said they would permanently offer consumers free weekly credit reports, at AnnualCreditReport.com.

Free access is important because the information in credit reports can have a profound effect on many elements of one's financial life, including the ability to get an auto, home, or student loan; use a credit card; rent an apartment; sign up for a cell phone plan; and even get a job.

Credit reports are also notoriously rife with errors. A nationally representative 2022 survey by CR found that 14 percent of people who ever checked their credit report found an error the last time they checked; and a 2012 Federal Trade Commission study revealed that 1 in 20 consumers found an error that could result in less favorable credit terms.

The bureaus began providing free reports during the COVID-19 pandemic, but the policy was set to expire at the end of 2023.

CR pushed for years to make credit reports permanently free to consumers, and more accurate. As part of our 2021 Credit Checkup project, a third of the nearly 6,000 volunteers who examined their reports told us they found errors. We collected almost 50,000 petition signatures calling for free access to reports. And we met with the industry's trade group shortly before the September announcement.

14%

of people found a mistake the last time they checked their credit reports.

Please support our efforts by signing our new petition, at **CR.org/creditpetition**, urging the bureaus to do more to address credit report errors. And go to **CR.org/reportfix** for advice on how to correct mistakes on your own reports.

SOURCE: CONSUMER REPORTS AMERICAN EXPERIENCES SURVEY OF 2,174 U.S. ADULTS, JANUARY 2022

CALL TO ACTION

CR recently published an article revealing the dangers of water beads, tiny gel balls that are marketed as toys but have sent thousands of children to emergency rooms. When children ingest water beads—which look like candy—the beads enlarge in their stomach or intestines, causing serious injuries and, in some cases, resulting in death. Sign CR's petition calling on the Consumer Product Safety Commission to ban the sale of water beads as toys and to secure recalls of water beads that are already in American homes, at **CR.org/banwaterbeads**.

Protecting Our Privacy

WHAT'S AT STAKE

Every time we buy something on the internet–or merely browse for a product–our online security and personal privacy are compromised, as companies track our every click. They then can sell what they learn to anyone who will pay for the information.

Our data is often being used by marketers looking to sell us stuff. But it can also be employed in ways that can result in denying you a loan, a job, or insurance coverage on the basis of race, gender, or other private info.

WHAT CR IS DOING ABOUT IT

CR has long fought to give consumers more control over their personal data. In recent years, for example, we've worked closely with state legislators to develop strong data privacy laws, and strengthen weak ones. But even when such laws give consumers the right to stop the sharing and selling of their information, exercising those rights–one company at a time–can be impossibly time-consuming.

That's why CR recently launched Permission Slip, a free mobile app that reveals the kinds of information about you that companies collect, trade, and sell. Then, if you choose, a simple tap will send a request to those companies to delete your accounts or stop selling your information. And the app will even follow up with the companies later to help ensure that your request has been fulfilled.

As of mid-October, consumers had initiated more than a million opt-out and deletion requests through Permission Slip.

WHAT YOU CAN DO

You can learn more at **permissionslipcr.com**, and download the free app at Apple's App Store or the Google Play store.

ILLUSTRATIONS BY JOHN RITTER

BEST & WORST AIRLINES
THE SAFEST CARS
SECRETS TO BETTER CELL SERVICE
CR Consumer Reports
10 REALLY RISKY FOODS
Deli meat. Lettuce. Cookie dough. Here's how to eat (most of) what you love without getting sick.

Our October 2023 cover story, **"10 Really Risky Foods,"** reported on the ones most likely to carry dangerous bacteria–and offered expert advice to help you stay safe when eating them. Readers shared their thoughts and questions. To add yours, head to **CR.org/riskyfoods**.

I REALLY ENJOYED READING the food safety article. I noticed that you mention uncooked flours as being potentially risky for pathogens like E. coli, but what about other dry goods like oats, which are often prepared cold like cereal or overnight?
–Joseph Voytek, Westbrook, CT

EDITOR'S NOTE *Oats are traditionally steamed during processing, which will kill bacteria that can make you sick. Flour is not–so you need to cook or bake with it at home to ensure that it's safe for you to eat.*

I READ WITH INTEREST the warnings about rice containing arsenic. You included advice on cooking it and how often to eat it. But what about rice breakfast cereal? Should we be avoiding that as well?
–Mike Ayers, Forsyth, NC

EDITOR'S NOTE *CR hasn't recently tested hot or cold breakfast cereals for arsenic contamination. In our 2014 tests, we found that an adult could safely eat 3 cups of cold rice cereal or two ¼-cup servings of hot rice cereal per week, assuming they didn't consume any other arsenic-containing foods that week. "We know from more current testing that infant rice cereals can be high in arsenic, so, for adults, following these guidelines for hot and cold rice cereals still makes sense," says James E. Rogers, PhD, director and acting head of product safety testing at CR. Alternating rice cereals with those made from other grains is also a good idea.*

YOUR STORY ON risky foods may cause some readers to abandon leafy greens, fruits, chicken, and turkey, replacing them with highly processed foods. That would almost certainly increase the long-term risk to their health.
–James Swindle, Spring, TX

EDITOR'S NOTE *Several of the foods on the list, such as fruits and leafy greens, are important components of a healthy diet, and we don't advise that most people avoid them. But it's important to be aware of the potential risks of foodborne illness and how to minimize them. The article gives information from CR's food safety experts on how to make these foods safer to eat.*

WRITE

Go to CR.org/lettertoeditor to share your comments for publication.

BUYING EYEGLASSES

AFTER READING "Get Great Glasses for Way Less," I started my research into two low-cost brands. I think it's worth noting that neither Zenni Optical nor Eyebuydirect offers trifocals.
–Linda Morris, Harriman, TN

EDITOR'S NOTE *Trifocal lenses are indeed an option for people who need vision correction at close, middle, and far distances, and they can be a cheaper option than progressive lenses. More than three-quarters of our members who evaluated their eyeglasses stores for our ratings told us they use bifocal, trifocal, or progressive lenses. Still, trifocals aren't as common as bifocal or progressive lenses, and it's true that some retailers don't offer them. Before you try a new retailer, you may want to confirm that it can make trifocal lenses for you.*

AIR TRAVEL ADVICE

I'D LIKE TO VALIDATE the airline survey results in "CR's Guide to Hassle-Free Flying." I flew Frontier Airlines

round trip from Phoenix to Nashville in July. Frontier had a very attractive offer—but by the time I paid for premium seats, checked baggage, and carry-ons, the price of the flight was $1,480. Then, before the trip, my wife became ill and I had to cancel her flight. I learned that it is impossible to call Frontier and speak to a person. Communication must be done through the website. After several efforts and 4 hours with multiple chat sessions, I was able to cancel her flight. Fortunately, they were able to refund the cost of her ticket after I provided proof of her illness. The final insult came when I was returning home and asked the clerk when I checked my baggage for a paper copy of my boarding pass. She said it would cost me $25 to print the one-page form. I declined. I will never fly Frontier again!
–Dan Watson, Oracle, AZ

CONNECT WITH US

FACEBOOK
fb.com/consumerreports
fb.com/SomosCR

INSTAGRAM
@consumerreports

LINKEDIN
/company/consumer-reports

TIKTOK
@consumerreports

THREADS
@consumerreports

TWITTER
@consumerreports
@SomosCR

YOUTUBE
/consumerreports

YOU SUGGEST noise-canceling headphones, and those certainly help, both with crying children and engine rumble. I got the excellent (but bulky) Bose headphones with credit-card points, and they do indeed work great. But for far less you can get earplugs that do a swell job, though they won't play music for you.
–Don Ridgway, El Cajon, CA

EDITOR'S NOTE *Earplugs can be a simple solution for a noisy cabin. We recently evaluated several brands and found Lysian Soft Foam Earplugs (starting at $9) to be both effective and comfortable for a range of users.*

EXTINGUISHER DISPOSAL

IN THE Ask Our Experts column, you recommend replacing a fire extinguisher that's too old. But how do you dispose of an expired, unused fire extinguisher? Since they're pressurized, I'm guessing they can't just go in the trash.
–Stacy Tollie, Winston-Salem, NC

EDITOR'S NOTE *Correct. An unused fire extinguisher contains hazardous materials under pressure and should not be tossed in with your household trash. Fire extinguisher manufacturer Kidde suggests checking with your public works department for disposal instructions. Some municipalities have fire extinguisher recycling programs, or they may direct you to a nearby disposal site for household hazardous waste. You could also call your fire department to see whether it accepts old fire extinguishers, or search at earth911.com for recycling centers near you.*

WHY ARE DISHWASHER CYCLES SO LONG?

Regarding "The Top Dishwashers From Our Tests": Why do most models now have 2-hour-plus cycles? Our family uses an older Bosch with a 30-minute cycle. We rinse our dishes beforehand. Everything comes out perfectly clean. The newer models may use very little water, but the motor runs much longer—which doesn't seem like a good way to save electricity.
—Jane Carter, North Falmouth, MA

EDITOR'S NOTE *Because newer dishwashers use less water, they need extra time to clean your dishes. "Most of the energy a dishwasher uses is to heat the water at the start of the cycle," says Larry Ciufo, who oversees CR's dishwasher testing. "So by prerinsing your dishes you're using more water and energy than you would running the machine for 2 hours."*

ELECTRIC VEHICLE STATS

WHEN REVIEWING an electric vehicle (EV) [as in the "Green Choices" ratings on page 63], it would be very helpful if you reported the miles/kWh in addition to or instead of MPGe. Electric rates vary considerably depending on the utility. This would let readers calculate their cost per mile to see if an EV would save them on fuel costs. It would also be useful to know the cost in $/kWh when using the different charging networks that are currently available. I have read they vary widely.
–Owen LeGare, Davis, CA

EDITOR'S NOTE *Miles-per-gallon equivalent can be a useful metric when comparing the efficiency of electric vehicles to regular gas and hybrid vehicles. But you are absolutely correct that miles per kilowatt-hour (kWh is a measure of electrical energy in an EV's battery) is better for understanding an EV's efficiency in the real world and calculating energy costs. We have recently expanded our online information for electric vehicles to provide necessary details such as miles per kWh, charging performance, range, battery size, and more. You'll see that information included in our electric vehicle coverage in future issues of the magazine, too.*

CORRECTION
We erroneously switched product photos on page 37 in some copies of the November/December 2023 issue. The leaf blower identified as the Stihl BGA 57 is actually the Makita GBU01M1, and vice versa. On the same page, the lawn mower that was identified as the Ego LM2114SP is the Ryobi RY401200, and vice versa.

ILLUSTRATION BY JASON SCHNEIDER

What We're Testing in Our Labs ...

In our 63 labs, we continually review and rate products. Here, timely picks for this month.

Toaster Ovens That Double as Air Fryers

WE TESTED: 30 models
WE TEST FOR: How well it reheats lasagna, how evenly it bakes cookies, and how quickly it toasts bread. We also test the oven's air-frying abilities.

ABOUT THE SCORES:
Median: 59
Range: 44-74

EXTRA-LARGE INTERIOR
Breville The Smart Oven Air Fryer Pro BOV900BSSUSC
$400

74 OVERALL SCORE

SPEEDY TOASTING
Ninja 12-in-1 Double Oven DCT401
$250

70 OVERALL SCORE

GREAT FOR BAKING
Hamilton Beach Sure-Crisp 31193
$90

67 OVERALL SCORE

Stainless Steel Frying Pans

WE TESTED: 7 pans
WE TEST FOR: How evenly it heats up, how sturdy the handle is, how easy it is to clean, and more.

ABOUT THE SCORES:
Median: 78
Range: 72-89

BEST OVERALL
Oxo Stainless Steel Mira Series, 10-inch
$80

89 OVERALL SCORE

EVEN COOKING
All-Clad D3 Stainless Everyday 3-Ply Bonded, 10.5-inch
$100

78 OVERALL SCORE

NICE PRICE BUT LESS STURDY
Cuisinart Chef's Classic Stainless, 10-inch
$40

75 OVERALL SCORE

Ask Our Experts

How can I keep food from sticking to a stainless steel pan?

THE SECRET IS to preheat your pan properly. Stainless steel has pores in it that shrink when the steel heats up. If it doesn't get hot enough, food (especially fish and eggs) can get caught in pores that are still contracting and then stick to the pan. To preheat your pan, place it over medium heat for 1 to 2 minutes, then sprinkle a few drops of water on it to see if they form beads that glide along the surface. If the water doesn't bead, try again in 30 seconds. Once the water forms beads, add oil or butter, swirl it around, then add the food. Wait a minute to move what you're cooking because the pan's temperature drops slightly when you add food. Using these steps, food should glide right out of the pan.

ILLUSTRATION: JOSEPH CARRINGTON. PHOTOS: CONSUMER REPORTS; MANUFACTURERS

WORSE — BETTER | CR RECOMMENDED | CR SMART BUY

For the latest ratings of these and other product categories, readers with a Digital or All Access membership can go to **CR.org**.

Cordless Vacuums

WE TESTED: 74 cordless handheld and stick models*
WE TEST FOR: A vacuum's ability to clean carpets and bare floors, average run time on a single charge using multiple settings, and more.

ABOUT THE SCORES:
Median: 65
Range: 40-80

BEST STICK BUT PRICEY
(47-MIN. RUN TIME)
Samsung Bespoke Jet VS28C9762UK/AA
$900

81 OVERALL SCORE

TOP HANDHELD
(10-MIN. RUN TIME)
Shark Ion W1 WV201
$85

80 OVERALL SCORE

LIGHTWEIGHT STICK FOR LESS
(23-MIN. RUN TIME)
Hoover ONEPWR Blade Max BH53350
$215

71 OVERALL SCORE

Smart Door Locks

WE TESTED: 55 models
WE TEST FOR: How long a lock stands up to increasingly forceful impacts, drilling assaults, and lock-picking; how easy the smart features are to use; and more.

ABOUT THE SCORES:
Median: 58
Range: 15-98

ADDS ON TO AN EXISTING LOCK
Bosma Aegia Smart Lock SL0001
$80

98 OVERALL SCORE

UNLOCKS WITH YOUR FINGERPRINT
Eufy Smart Lock Touch & WiFi S230
$260

85 OVERALL SCORE

EASY FOR APPLE WATCH & IPHONE USERS
Schlage Encode Plus WiFi BE499WB-CAM 619
$275

78 OVERALL SCORE

Bathroom Scales

WE TESTED: 18 digital models
WE TEST FOR: How accurately a scale reports weight, how consistent the results are over multiple weighings and when weight isn't equally distributed, and more.

ABOUT THE SCORES:
Median: 87
Range: 42-92

BEST OVERALL & A LIFETIME WARRANTY
Escali High Capacity Anti-Slip HC225W
$50

92 OVERALL SCORE

CONSISTENT & A 5-YEAR WARRANTY
Vitafit Digital Body Weight VT1703U
$20

90 OVERALL SCORE

BARGAIN BUT JUST A 1-YEAR WARRANTY
Ozeri Precision ZB18
$16

86 OVERALL SCORE

Treadmills

WE TESTED: 53 models
WE TEST FOR: The quality of construction, how easy it is to use the treadmill's controls and preset programs, how safe it is during use, and more.

ABOUT THE SCORES:
Median: 81
Range: 48-88

FOLDS UP TO SAVE SPACE
Horizon 7.4 AT
$1,600

87 OVERALL SCORE

HIGH WEIGHT CAPACITY
(UP TO 400 LB.)
LifeFitness Run CX
$3,600

85 OVERALL SCORE

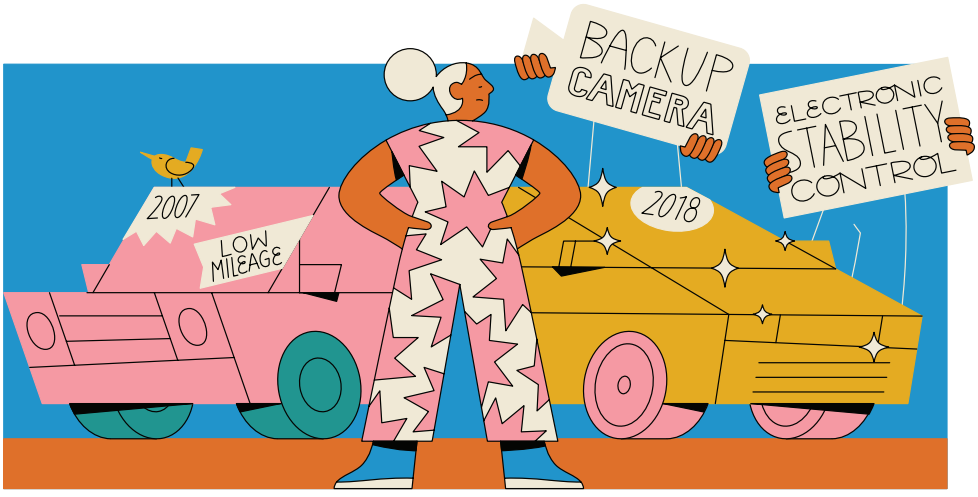
SUPERIOR INCLINE ABILITY
NordicTrack Commercial X22i
$3,500

84 OVERALL SCORE

Note: *We rate different products according to different testing protocols; as a result, Overall Scores of one product category are not comparable with another.*

*CR does not currently recommend any cordless stick vacuums because of the generally high incidence of problems reported by our members by the fifth year of ownership.

COMING NEXT MONTH Rowing Machines & More



A used car I'm interested in has a lot of miles on it. Is this a bad buy?

A USED VEHICLE with high mileage—like a 3-year-old model driven more than 50,000 miles or an older model with over 100,000 miles—can still be a good choice. But you'll need to check a few important things. First, ask for the car's maintenance history, says Gabriel Shenhar, associate director of CR's auto test program. That will tell you if it has been regularly serviced or not. Keep in mind that even a well-maintained high-mileage vehicle could require pricey service and repair work, such as a fuel pump replacement or new shocks. So factor in that cost, and set up a rainy day fund of $1,000 or more for emergency repairs.

One surprising thing: Older models that have very low mileage (for example, a 2017 model with less than 40,000 miles) aren't always the better choice. According to Shenhar, a car that hasn't been driven much might indicate a lack of maintenance or other issues.

Jennifer Stockburger, director of operations at CR's Auto Test Center, says: "When buying a used car, I would lean toward vehicles made in the last five years, even if they have more miles. There have been so many safety and fuel-economy advances. The older the vehicle, the less likely it will have key safety features."

Before you close the deal on any used car, have it checked by a repair shop. (This could cost $100 to $150, but it's worth it.) Also get a Carfax report, which will show if the car was stolen or in a crash and if it had any recall-related repairs.

LEARN

We have more than 140 in-house experts who research, test, and compare. Submit your questions at CR.org/askourexperts ... and watch for the answers.

I've heard a new Alzheimer's drug may actually slow memory loss. Is this true?

IN JULY 2023, the Food and Drug Administration granted full approval to lecanemab (Leqembi), which studies have shown may help slow cognitive decline in adults with early Alzheimer's disease. Leqembi, which is administered in twice-monthly injections, binds to brain amyloids, the abnormal proteins thought to play a role in Alzheimer's. The drug prompts immune cells to essentially "chop up the amyloid and get rid of it," says Rudolph Tanzi, PhD, co-director of the MassGeneral Institute for Neurodegenerative Disease at Massachusetts General Hospital and a professor of neurology at the Harvard Medical School. Those who took Leqembi in a clinical study showed 25 percent less cognitive decline than people who took a placebo, but that change might not be perceptible day to day.

Leqembi is approved only for people with early-stage Alzheimer's. And while it's effective at attacking brain amyloids, the extent to which it mitigates symptoms remains unclear. The drug may also cause potentially serious side effects, such as brain bleeds, a small number of which have been fatal. If you or a loved one are interested in Leqembi, talk with your Alzheimer's disease specialist about its benefits and risks. Also consider the cost. Medicare offers coverage for the drug, making it more affordable, but patients could still be on the hook for thousands of dollars each year.

Why are brown eggs more expensive than white ones? Are they better for you?

THE COLOR OF an egg's shell is determined by the breed of chicken that lays it. Eggs with brown shells often cost more than those with white shells because they're usually laid by a larger breed of hen that requires more food, which makes the eggs more expensive for farmers to produce. But there's no nutritional, size, or environmental advantage to brown eggs.

Regardless of shell color, one large egg has about 70 calories, 6 grams of protein, 2 grams of saturated fat, about 185 milligrams of cholesterol, and a long list of other nutrients. These include lecithin, an important component of cell membranes, and high levels of choline, a nutrient that aids brain development. Egg yolks also contain phosvitin, a protein that maintains healthy skin, and carotenoids—such as carotene, lutein, and zeaxanthin—which have antioxidant properties thought to help reduce the risk of eye diseases like macular degeneration.

ILLUSTRATIONS BY JOSEPH CARRINGTON

IN THE KNOW

3 Surprising Things Your Smart Speaker Can Do

SMART SPEAKERS are on their way to becoming as ubiquitous in U.S. homes as the microwave. But you may be using only a fraction of the wizardry these gadgets can provide. Whether you own an Amazon, Apple, Google, or other brand of speaker, it can solve some common problems for you.

'Siri, where is my phone?'

Can't remember where you put your phone? Ask your smart speaker to give it a ring or "find my phone." (The first time you ask, the virtual assistant will help you set up this feature with your phone number.)

'Hey Google, remind me to take my vitamins every day at 8 a.m.'

Most people know that a smart speaker can create a one-time reminder, but it can also handle more complex, repeating alarms. On Google and Apple, tell it "remind me at 6 p.m. every Tuesday to take my medicine." On Amazon: "Alexa, create a new reminder." The device will prompt you for details.

'Alexa, announce that dinner is ready.'

If you own more than one smart speaker, you can make intercom-style announcements via every compatible speaker in the house. On Amazon, ask Alexa to "announce that dinner is ready." To Google, say: "Broadcast that ..." To Siri, say, "Ask everyone ..." (Siri's intercom feature can also work on connected Apple devices like your iPhone, iPad, and Apple watch.)

68 OVERALL SCORE

Amazon Echo Studio $200
ALEXA

66 OVERALL SCORE

Apple HomePod (2nd Gen) $300
SIRI

65 OVERALL SCORE

Bose Home Speaker 300 $200
ALEXA & GOOGLE HOME

Google Nest Audio $65
GOOGLE HOME

63 OVERALL SCORE

PHOTOS: BEN GOLDSTEIN; PROP STYLING BY MIAKO KATOH (GOOGLE NEST AUDIO); MANUFACTURERS (3)

For our complete ratings of smart speakers, go to CR.org/smartspeakers.

TOP PICKS

5 Ways to Get and Stay Energized

Twinkly Strings, 100 count $70

Even after the holidays are over, string lights add cheer to a dark patio. CR's Dan Wroclawski likes these app-controlled LED lights, which let you change the colors of the bulbs.

Headspace app $13 per month

A favorite of CR staffer Joanne Chen, this app offers audio sessions on how to boost your energy, increase productivity, improve sleep, and more.

Lauren F. Friedman
CR Health Editor

I DRINK THIS!

Barry's Tea Gold Blend
$40 for 40 tea bags

I swear by this strong Irish breakfast tea. It brews almost instantly (which is great if you're in a hurry) and offers a pick-me-up close to coffee. It has a bold flavor, so I always add some milk.

CR Time Traveler LIGHTING

1879 Thomas A. Edison makes the first public demonstration of his incandescent lightbulb in Menlo Park, N.J.

1941 We compare incandescent vs. fluorescent lightbulbs. The fluorescents save $4.60 over incandescents and should last 1,300 hours longer, we report.

1949 Our article "The Great Lamp Controversy" says that too many modern lamps aim to be "an objet d'art" rather than an important source of light.

1955 We recommend this Coleman lantern, $14, for camping. It operates even in heavy rain and provides a strong, steady light for about 12 hours.

1963 Edward Craven Walker markets the "Astro" lava lamp. His lava lamps become incredibly popular in the U.S. throughout the 1960s.

WORSE — BETTER | CR RECOMMENDED | CR SMART BUY

365 Roasted & Unsalted Almonds (Whole Foods) $6

"Almonds are a nutrient-dense snack that, when combined with cheese, whole-grain crackers, or fruit, can be an energizing bite between meals," says CR nutritionist Amy Keating. Opt for unsalted nuts, like these, which did well in our past taste tests.

Philips SmartSleep Wake-up Light HF3520/60 $109

Exposure to morning light helps cue your body's circadian rhythm. This alarm clock, which gradually brightens to wake you, may help you feel more alert on dark winter days.

FACE-OFF

Top Glass Cleaners From Our Tests

GLASS SURFACES are magnets for debris: Windows amass dirt, picture frames gather dust, cooktops collect water spots, and bathroom mirrors reflect every tiny dot of toothpaste. And if you try to wipe away that grime with a not-so-good glass cleaner? You may get unsightly streaks, drip marks, and spots. CR staffer Jodhaira Rodriguez evaluated six glass cleaners to see how well they handled toothpaste, fingerprints, a mixture of margarine and flour, and red lipstick on her mirrors and windows. Using a microfiber cloth, Rodriguez counted the number of wipes needed to remove the mess. The top three cleaners here left glass streak-free.

CR'S PICK

Sprayway Glass Cleaner $4.30

This ammonia-free, no-drip foaming formula easily cut through every type of grime, leaving most surfaces sparkling after a single wipe. Of the six products, it was the quickest to dry on mirrors and windows. It's also safe to use on chrome, tile, and porcelain surfaces.

RUNNER-UP

Invisible Glass Glass Cleaner $4.60

Invisible Glass left the tested mirrors and windows shiny and streak-free. And its formula is ammonia-free, which means this spray is also safe to use on some surfaces that ammonia-based cleaners would otherwise damage, such as tinted car windows.

BEST AMMONIA-BASED

Windex Original Glass Cleaner $4.50

Windex is popular for good reason: It left mirrors and windows spotless, just like the Invisible Glass spray. But it contains ammonia, so don't use it on tinted windows, wood, or stone. And never mix it with products that contain bleach; the combo can produce toxic fumes.

For reviews of the other three cleaners we tested that didn't work as well, go to CR.org/glassclean.

1971 We warn against plastic candleholders: We tested 10 (including this flower-shaped one) and found that all either caught fire or melted.

1987 Sick of burnt out bulbs? We say to buy GE's Watt-Miser Plus 67-watt incandescent bulbs. They last 2,500 hours; conventional 60-watt bulbs last about 1,000 hours.

1997 Some halogen floor lamp designs are a fire hazard. We say to buy only new models that meet the revised standard and have a metal-grate guard and thermal protector.

2014 Stores are now filled with LED (light-emitting diode) bulbs, which last longer than incandescents. We find some that impress us for under $20.

2023 In our review of 10 smart bulbs, we like this smart TP-Link bulb for its quick response to app controls and its superior dimming ability.

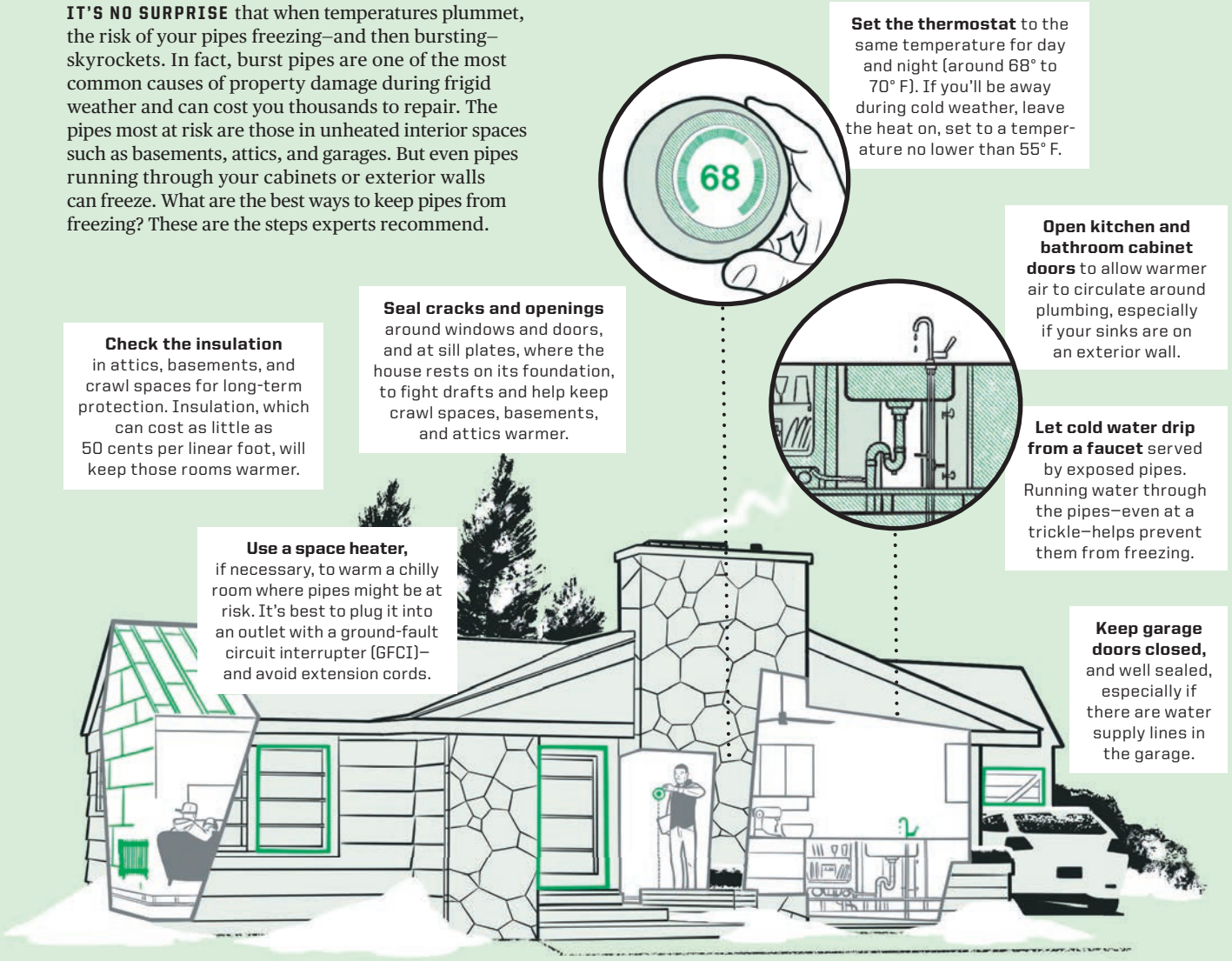
TP-Link Kasa Smart WiFi Lightbulb Multicolor KL125 $15

For our latest guide to home lighting, turn to page 34 in this issue.

EASY DIY

Prevent Frozen Pipes This Winter

IT'S NO SURPRISE that when temperatures plummet, the risk of your pipes freezing–and then bursting–skyrockets. In fact, burst pipes are one of the most common causes of property damage during frigid weather and can cost you thousands to repair. The pipes most at risk are those in unheated interior spaces such as basements, attics, and garages. But even pipes running through your cabinets or exterior walls can freeze. What are the best ways to keep pipes from freezing? These are the steps experts recommend.



Set the thermostat to the same temperature for day and night (around 68° to 70° F). If you'll be away during cold weather, leave the heat on, set to a temperature no lower than 55° F.

Open kitchen and bathroom cabinet doors to allow warmer air to circulate around plumbing, especially if your sinks are on an exterior wall.

Check the insulation in attics, basements, and crawl spaces for long-term protection. Insulation, which can cost as little as 50 cents per linear foot, will keep those rooms warmer.

Seal cracks and openings around windows and doors, and at sill plates, where the house rests on its foundation, to fight drafts and help keep crawl spaces, basements, and attics warmer.

Let cold water drip from a faucet served by exposed pipes. Running water through the pipes–even at a trickle–helps prevent them from freezing.

Use a space heater, if necessary, to warm a chilly room where pipes might be at risk. It's best to plug it into an outlet with a ground-fault circuit interrupter (GFCI)–and avoid extension cords.

Keep garage doors closed, and well sealed, especially if there are water supply lines in the garage.

HOW TO THAW A FROZEN PIPE

If your pipes are frozen, and they're in an accessible spot, warm them back up to running temperature. Most important, says John Galeotafiore, who oversees CR's home product testing, "be careful and go slowly." And if you think a pipe may have already burst, don't attempt to fix it yourself—call a plumber.

› **Turn on the faucet.** This way, you'll be able to see the water start to flow through—a sign that it's working. Also, running water (even if it's cold) will help melt more of the ice inside.

› **Apply heat.** Use an electric hair dryer or a space heater (kept away from flammable materials), or wrap an electric heating pad or towels soaked in hot water around the pipe. (Never use any device with an open flame, which can damage your pipes or start a fire.)

› **Thaw** as close to the faucet as possible, working your way to the coldest section. Keep heating until full water pressure is restored.

ILLUSTRATION: JASON SCHNEIDER. PHOTOS, PREVIOUS SPREAD: BEN GOLDSTEIN; PROP STYLING BY MIAKO KATOH (TOP LEFT AND TEA); FROM GENERAL ELECTRIC CO. (1879 LIGHT BULB); IAN COOK/GETTY IMAGES (EDWARD CRAVEN WALKER); CONSUMER REPORTS (12)

PRODUCT SPOTLIGHT

Paper Shredders

IN OUR HIGH-TECH WORLD, protecting yourself from identity theft requires digital precautions like complex passwords. But low-tech tools, like paper shredders, are a crucial safeguard, too. Account statements, receipts, and other documents can all contain sensitive data that needs to be disposed of securely. Even pre-approved credit card offers contain details that a scammer could steal and use.

We tested 14 shredders to see how quickly, quietly, and securely they did the job. Security depends on the shred size: The smaller the pieces it makes, the more secure you'll be. (See two common cut types to look for, below.)

The nine models shown here performed the best in our testing.

89
OVERALL SCORE

Fellowes Powershred LX22M 5263501
$346

- 4/5 SPEED
- 5/5 EFFECTIVE CAPACITY
- 5/5 CONVENIENCE
- 5/5 NOISE

MICRO-CUT SHREDDERS,

like the Fellowes, above right, offer the best security for home shredding because the shreds are so small: about ½ inch long and ⅛ inch wide.

72
OVERALL SCORE

Tru Red 12 Sheet Microcut Tr-Nmc122a
$120

- 3/5 SPEED
- 3/5 EFFECTIVE CAPACITY
- 5/5 CONVENIENCE
- 4/5 NOISE

71
OVERALL SCORE

Amazon Basics 8 Sheet Microcut
$75

- 5/5 SPEED
- 2/5 EFFECTIVE CAPACITY
- 5/5 CONVENIENCE
- 3/5 NOISE

70
OVERALL SCORE

Aurora AU1210MA 12 Sheet Microcut
$125

- 3/5 SPEED
- 3/5 EFFECTIVE CAPACITY
- 5/5 CONVENIENCE
- 3/5 NOISE

62
OVERALL SCORE

Bonsaii 6 Sheet Microcut C261D
$42

- 5/5 SPEED
- 2/5 EFFECTIVE CAPACITY
- 3/5 CONVENIENCE
- 3/5 NOISE

CROSS-CUT SHREDDERS,

like the Wolverine at right, can still be a good choice but are less secure, creating strips roughly the same width as micro-cuts, but longer.

74
OVERALL SCORE

Wolverine 18 Sheet Crosscut SD9113
$280

- 4/5 SPEED
- 5/5 EFFECTIVE CAPACITY
- 5/5 CONVENIENCE
- 4/5 NOISE

68
OVERALL SCORE

Bonsaii 15 Sheet C169-B
$110

- 3/5 SPEED
- 4/5 EFFECTIVE CAPACITY
- 5/5 CONVENIENCE
- 3/5 NOISE

65
OVERALL SCORE

Fellowes Powershred 12C15 4014401
$104

- 4/5 SPEED
- 3/5 EFFECTIVE CAPACITY
- 4/5 CONVENIENCE
- 5/5 NOISE

63
OVERALL SCORE

VidaTeco 14 Sheet Crosscut 1201C
$77

- 4/5 SPEED
- 4/5 EFFECTIVE CAPACITY
- 4/5 CONVENIENCE
- 2/5 NOISE

PHOTOS, FROM TOP: SCOTT MEADOWS/CONSUMER REPORTS (1); MANUFACTURERS (8)

WORSE — BETTER | CR RECOMMENDED

FOOD IQ™

Which Beans Taste Best?

WHEN IT COMES to healthy foods, beans are hard to beat. They're packed with plant protein and fiber, and contain vitamins and minerals like folate and iron. They're also low in saturated fat–and they usually cost just pennies per serving. But canned beans can also be mushy, too firm, bland, and/or packed with excess sodium.

Our team of expert tasters opened cans of chickpeas and black beans from several popular brands to find out which ones offered the best texture and taste. We also drained and rinsed all of the beans prior to tasting, and sent them to a lab to see how much doing so would reduce their sodium content. In some cases, rinsing reduced the amount of sodium by half. (While the calories, fats, fiber, carbs, and protein counts in beans are similar across brands, the sodium amounts vary widely.) Here, we reveal the best-tasting beans from our tests, and one to skip.

CHICKPEAS

Per ½ cup: 132 calories, 3 g total fat, 0 g saturated fat, 7 g fiber, 20 g carbohydrates, 7 g protein

TOP PICK

Bush's Chick Peas $1.60

These beans are flavorful, with a nutty, buttery vibe. The texture of the beans varied, ranging from firm to tender. They are a good choice for soups and stews, or blended into hummus.

Sodium: 480 mg
Sodium after rinsing: 240 mg

BEST FOR SALADS

Goya Chick Peas $1.50

Large and plump with a nutty flavor and creamy interior, these beans would be perfect in a salad, or try them roasted in the oven for a crunchy snack.

Sodium: 340 mg
Sodium after rinsing: 195 mg

LOW SODIUM & ORGANIC

Cento Organic Chick Peas Low Sodium $2.60

These are on the small side, but they're a decent choice for those watching their sodium. They're a bit bland, so it's best to pair them with flavorful ingredients like lemon juice, garlic, and herbs.

Sodium: 130 mg
Sodium after rinsing: 60 mg

BLACK BEANS

Per ½ cup: 110 calories, 0.5 g total fat, 0 g saturated fat, 8 g fiber, 20 g carbohydrates, 8 g protein

TOP PICK

Goya Black Beans $1.60

These are earthy, with a hint of nuttiness. The cans contained mostly whole beans that had a firm texture and tender interior. We think these beans would be great in chili or a chunky soup because they're not mushy.

Sodium: 410 mg
Sodium after rinsing: 240 mg

NO SALT ADDED & ORGANIC

Eden Organic Black Beans $2.90

These beans are low in sodium because they are packaged with tiny bits of seaweed instead of salt. They're a good choice for those who must keep an eye on sodium intake. Their flavor is mild, and the texture is slightly firm.

Sodium: 15 mg
Sodium after rinsing: <5 mg

SKIP THESE BEANS

Iberia Black Beans $1.50

The tough, chewy skins and overly firm texture of these was a turnoff to our testers. And while their sodium level was fine, they tasted mild—which would prompt most to pull out the salt shaker.

Sodium: 130 mg
Sodium after rinsing: 100 mg

PHOTOS, FROM LEFT: BEN GOLDSTEIN; PROP STYLING BY MIAKO KATOH; SCOTT MEADOWS/CONSUMER REPORTS

Note: Sodium listed for label, serving size, and per half-cup (85 g) rinsed.

RECALLS

TO STAY INFORMED ABOUT RECALLS FOR YOUR VEHICLES, READERS WITH MEMBERSHIP CAN USE OUR FREE CAR RECALL TRACKER AT **CR.ORG/MORE**.

Ram 1500 Pickup

RAM PICKUP TRUCKS

Ram is recalling 272,911 Ram 1500 (2022-2023), 2500 (2022-2024), and 3500 (2022-2023) pickup trucks because software incompatibility between the vehicle's radio and backup camera could cause the image not to display when in Reverse, risking a crash. This also means the vehicle is not in compliance with the Federal Motor Vehicle Safety Standard.
What to do: Ram dealers will perform a software update, free of charge. The NHTSA campaign number is 23V654, and Ram's own number for this recall is 97A. For more information, call 800-853-1403.

SLIME LICKER CANDY

Candy Dynamics is recalling about 70 million Slime Licker Sour Rolling Liquid candies because the candy's rolling ball can detach, posing a choking hazard. The candies were sold at Five Below, Walmart, and other stores nationwide, and online at Amazon, candydynamics.com, and other sites from June 2015 through July 2023 for $2 to $4.
What to do: Take the candy away from children. Call Candy Dynamics at 877-546-0483 or go to candydynamics.com for details and to get a full refund for products that are not empty.

HONDA LAWN MOWERS & PRESSURE WASHER ENGINES

American Honda Motor is recalling about 391,800 lawn mowers and pressure washer engines because an improperly manufactured part in the engines can cause the starter rope to suddenly retract when pulling to start, posing an injury hazard. The lawn mowers were sold at Ace Hardware, Home Depot, Honda Power Equipment dealers, Lowe's, Northern Tool, and various farm, agricultural, and rental stores nationwide from May 2022 to June 2023 for $550 to $1,100. Pressure washer engines were sold at Home Depot, Lowe's, and other retail stores nationwide from June 2022 to August 2023 for $370 to $550.
What to do: Stop using the lawn mowers and pressure washers. Contact an authorized Honda Power Equipment dealer to schedule an appointment for a free inspection and repair. Or call American Honda Motor at 888-888-3139.

EMPORIA SMART PLUGS

Emporia is recalling about 80,000 of its smart plugs because the smart plugs are not adequately grounded and can pose an electric shock hazard. The smart plugs were sold online at Amazon and shop.emporiaenergy.com from July 2022 through May 2023 for $12 to $35.
What to do: Stop using the smart plug. Call Emporia at 844-367-6742 or go to emporiaenergy.com for details. Emporia will remotely disable the smart plug, and you should then discard it. The smart plug must be connected to the internet for the remote disabling process to be effective. If you are unable to connect to the internet to allow the remote disabling process, you may ship the item back to Emporia at no cost. Once the smart plug is disabled or returned, a free replacement or a full refund will be issued.

NOVAFORM MATTRESSES

FXI is recalling about 48,000 Novaform ComfortGrande 14-inch and Novaform DreamAway 8-inch mattresses because they could have been exposed to water during the manufacturing process, allowing mold to develop and posing a health risk to individuals with compromised immune systems, damaged lungs, or an allergy to mold. The mattresses were sold exclusively at Costco stores in certain states, and online at costco.com from January 2023 through June 2023 for $150 to $750.
What to do: Call FXI at 888-886-2057 or go to novaformcomfort.com for details and to receive a full refund or a free replacement mattress, including free delivery as well as pick up and disposal of the recalled mattress.

GENERAC PORTABLE GENERATORS

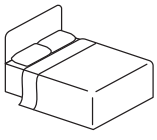
Generac is recalling about 64,000 portable generators because the fuel tank can fail to vent adequately, causing pressure to build up and the tank could expel fuel when opened, posing fire and burn hazards. The generators were sold at major home improvement and hardware stores nationwide and on various websites from April 2011 through June 2023 for $3,300 to $3,650.
What to do: Stop using the generators. Call Generac at 888-391-0503 for details and to get a free repair kit.

PHOTO: MANUFACTURER. ICONS: RODRIGO DAMATI

JANUARY IS THE BEST TIME TO BUY ...

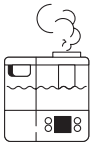
SMARTWATCHES

SHEETS & OTHER BEDDING



ELLIPTICALS

HUMIDIFIERS



PRODUCT UPDATE

THE LATEST RATINGS FROM OUR LABS

86

Omron Platinum BP5450 (Amazon)
$79

Why the Best Place to Check Blood Pressure May Be at Home

The numbers taken at a doctor's office can be unreliable. Find the most accurate home monitors here, and learn how to get your pressure under control. **By Catherine Roberts**

PHOTOGRAPH BY BEN GOLDSTEIN

YOU PROBABLY KNOW that high blood pressure (aka hypertension) is a top risk factor for some of the most common and deadliest medical emergencies, including heart attacks and strokes. Consistently high pressure can damage the tissue inside your arteries, leading to plaque buildup and reducing blood flow to your heart and brain.

But measuring your blood pressure accurately can be tricky. In fact, when you get it taken in a doctor's office, there's a good chance those numbers won't reflect your real blood pressure on an ordinary day. Raj Padwal, MD, a professor of medicine at the University of Alberta who runs a specialty hypertension clinic, says that he generally doesn't ask for in-clinic blood pressure readings for his patients "because 50 percent of the time they're inaccurate."

There are a few reasons that readings taken in a doctor's office can be misleading. But the good news is that there's an easy and relatively inexpensive way to get an accurate picture of your blood pressure from the comfort of your own home.

The Problem With Doctor's Office BP Checks

Blood pressure is exquisitely sensitive, changing from moment to moment. It's "affected by emotional status, mental health, physical activity, ambient temperature, medications, whether you ate, whether you slept well, and on and on," Padwal says.

This vital sign is measured with two numbers: systolic pressure, the top number, which represents the pressure on your arteries as your heart contracts; and diastolic pressure, the bottom number, representing the pressure on your arteries when your heart is at rest.

Getting an accurate blood pressure reading requires following a highly specific procedure that includes keeping your feet flat on the floor, your back against a sturdy chair, and an arm on a flat surface level with your heart. (There's a lot more to it; see "How to Get an Accurate Reading" starting on page 20 for a full rundown.) But many of these requirements aren't consistently met in a doctor's office, where staff may be too rushed to put you in the right position.

Plus, doctors' offices can have equipment problems. You might assume that the BP monitors there are more accurate than at-home monitors, but that's often not the case. Analog devices that use a cuff and pressure gauge need calibration every few months, but this rarely happens, says Jordana Cohen, MD, an associate professor of medicine and epidemiology at the University of Pennsylvania Perelman School of Medicine. Digital BP monitors, also used in medical settings, are more reliable. But only a fraction of them have been independently verified for accuracy, a process called validation. Also, your doctor's office may not have the right cuff size for your arm, and a too-big or too-small cuff can result in an inaccurate reading.

Some people also experience what's called white-coat hypertension, where their blood pressure rises in a doctor's office, possibly due to the stress of a medical visit. Others have masked hypertension, in which their blood pressure falls to a lower level in a doctor's office, possibly because those with a lot of stress in their daily lives feel calmer at a doctor's office. The true prevalence of these conditions isn't clear, but it's thought that 15 to 30 percent of people have white-coat hypertension, and about 32 percent of those with normal in-office BP readings have masked hypertension.

All of this may explain why your blood pressure readings at a doctor's office can vary so much. A 2023 study that evaluated data on more than half a million people found that between two consecutive doctor's visits, a person's systolic blood pressure reading changed by an average of 12 mmHg (the unit of measurement for blood pressure) in either direction.

That's not a rounding error. When you first start to take a new blood pressure medication, doctors generally expect it to lower your blood pressure by less than 12 mmHg, says the study's author, Harlan Krumholz, MD, a cardiologist and professor of medicine at the Yale School of Medicine. That means if your doctor relies only on in-office measurements, they can't be sure that a drop in your blood pressure is due to the medication working or to something else entirely.

Krumholz says the only way to overcome this is to collect a lot of measurements—20 or so—and average them. Fortunately, there's a simple way to help mitigate all of these problems: home blood pressure monitoring.

Why Home Monitoring Works So Well

When you measure at home, you can buy a high-quality monitor with a cuff that fits your arm. You can also be sure to prepare properly and use the correct procedure. And you can take multiple measurements on different days—and provide that data to your doctor.

Monitoring blood pressure at home is especially valuable for anyone whose in-office readings indicate high blood pressure and for those at an elevated risk for heart disease because of preexisting health conditions like diabetes, Padwal says. It can also be useful for tracking the effect of a new medication or an adjusted dosage, or for people who are pregnant or postpartum and should be on the lookout for a severe form of high blood pressure called preeclampsia.

PHOTO, PROP STYLING BY MIAKO KATOH

And not only can home monitoring be more accurate than in-office checks, but some studies have found that it can actually help you control your blood pressure, particularly in the first few months of using a monitor.

Choosing a Blood Pressure Monitor

Buying an accurate home blood pressure monitor is key. While most manufacturers haven't published the results from any accuracy testing, some medical groups have compiled lists of devices that have been validated by independent experts. All of the experts we talked with recommended the American Medical Association's US Blood Pressure Validated Device Listing (validatebp.org) as a good starting point when shopping for a home monitor.

CR also rates BP monitors. Our accuracy tests, which we pattern after industry standards, involve comparing each monitor's readings with the results from the gold standard, a device called a mercury sphygmomanometer. We also evaluate each monitor's ease of use and comfort. (See our ratings on page 23.)

Home blood pressure monitors come in two main varieties: those that are placed on your upper arm and those that go on your wrist. In general, experts (and CR) recommend arm monitors, which tend to be more accurate because there's less room for error in how they're positioned.

But using the correct arm cuff size is crucial in getting accurate readings, and some people with larger arm circumferences may not be able to find an arm monitor with an appropriate cuff size. In those cases, wrist monitors can be a good alternative. You'll just need to take extra care to position them correctly. None of the wrist monitors in CR's tests scored high enough to earn our recommendation, but several still earned very good accuracy scores.

You may wonder if an alternative

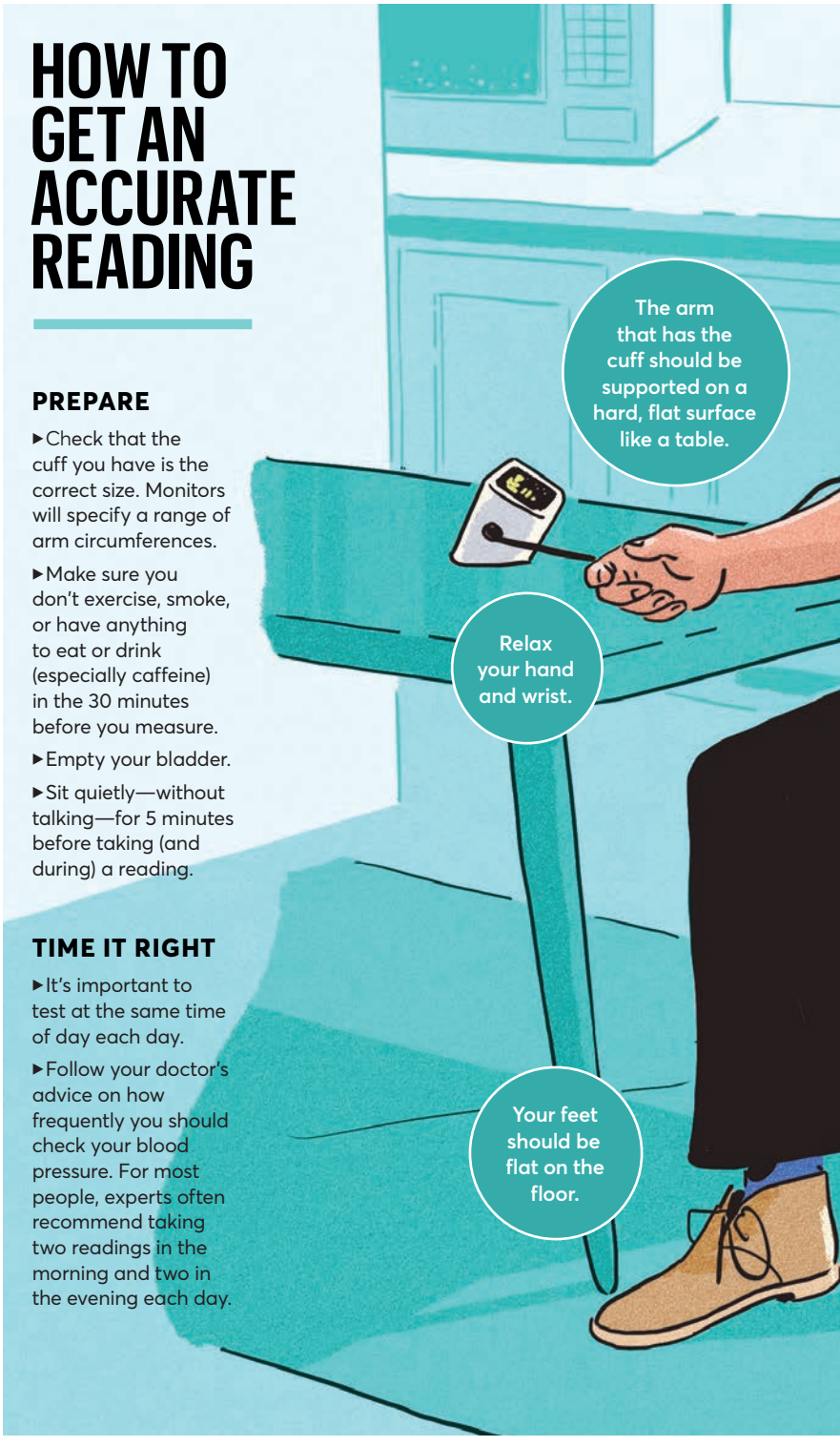
HOW TO GET AN ACCURATE READING

PREPARE

- Check that the cuff you have is the correct size. Monitors will specify a range of arm circumferences.
- Make sure you don't exercise, smoke, or have anything to eat or drink (especially caffeine) in the 30 minutes before you measure.
- Empty your bladder.
- Sit quietly—without talking—for 5 minutes before taking (and during) a reading.

TIME IT RIGHT

- It's important to test at the same time of day each day.
- Follow your doctor's advice on how frequently you should check your blood pressure. For most people, experts often recommend taking two readings in the morning and two in the evening each day.

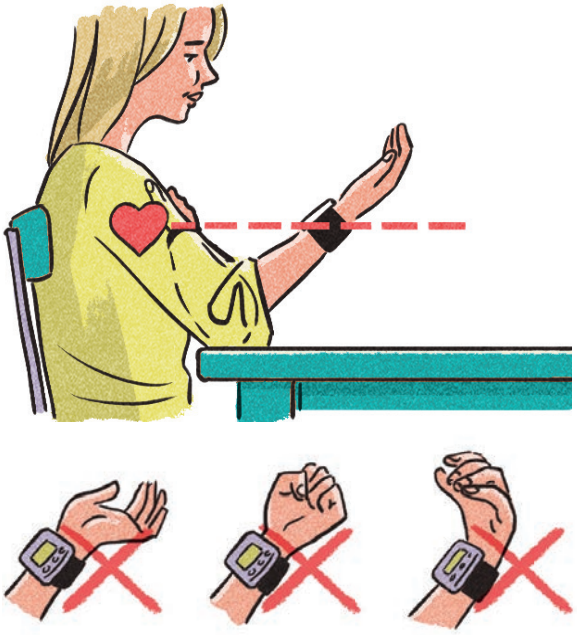

The arm that has the cuff should be supported on a hard, flat surface like a table.
Relax your hand and wrist.
Your feet should be flat on the floor.

ILLUSTRATIONS BY JACK RICHARDSON

Don't talk while taking a reading.
The cuff should be level with your heart.
Don't just roll up a long sleeve, as this can affect the reading.
Wear a short-sleeved shirt; a BP cuff should be on your bare skin.
Sit in a supportive chair with a rigid back (not a sofa).

WRIST MONITOR BASICS

Lifting your forearm or resting it against your chest are both valid methods for getting an accurate reading from a wrist monitor. The key? Make sure the monitor is level with your heart. Check your device's instructions, and keep your hand relaxed and your wrist in a neutral position.



UNDERSTAND YOUR NUMBERS

Guidelines from expert groups define normal blood pressure as less than 120/80. But you don't become a candidate for meds until you reach Stage 1 or Stage 2 hypertension.

BP PRESSURE CATEGORY	SYSTOLIC mmHg		DIASTOLIC mmHg
Normal	Less than 120	**AND**	Less than 80
Elevated	120-129	**AND**	Less than 80
High Blood Pressure Stage 1	130-139	**OR**	80-89
High Blood Pressure Stage 2	140 or more	**OR**	90 or more
Hypertensive Crisis (a medical emergency)	Higher than 180	**AND/OR**	Higher than 120

to buying your own blood pressure monitor is to use a blood pressure kiosk in your pharmacy. But Padwal says very few public blood pressure kiosks have been validated by independent experts. Plus, it might be challenging to follow guidelines for taking blood pressure correctly when you're in the middle of a busy pharmacy.

Got High Blood Pressure? Read This.

High blood pressure usually has no symptoms, so people taking medications for it may not see immediate benefits. That makes it hard for many to stick with their meds, Krumholz notes.

But the treatments for hypertension, including both medications and lifestyle changes, can successfully lower your blood pressure. Work with your doctor to find the strategy that works best for you. Here's what to consider:

Try the DASH diet. The Dietary Approaches to Stop Hypertension, or DASH, is an eating plan that can help lower your blood pressure (and your LDL cholesterol, another risk factor for cardiovascular disease). Rigorous studies have shown that people who followed the DASH plan had lower blood pressure levels at the end of several weeks than people who followed more typical American diets. The DASH diet offers a lot of flexibility and is based on a few simple principles:

- Eating lots of fruits, vegetables, whole grains, fish, poultry, beans, nuts, seeds, vegetable oils, and low-fat dairy.
- Limiting sources of saturated fats like fatty meats and full-fat dairy, as well as sweets and sugary beverages.
- Reducing salt in the diet is also key. When you take in more salt, your body retains more water, which can raise your blood pressure.

Keep in mind that most of our dietary sodium comes not from homemade food but from processed foods and restaurant meals. So focus on reducing those rather than forcing yourself to underseason the food you cook.

Aim for 30 minutes of exercise five days a week. Regular physical activity helps control blood pressure and reduces your risk of other problems, including heart attacks and strokes, diabetes, and even some cancers. An analysis published in 2023 in the British Journal of Sports Medicine evaluated 270 randomized controlled trials to find out if certain types of exercise were better for controlling blood pressure. Many different types were helpful, the study showed, so pick whichever form you enjoy. But it found the most benefit from isometric wall squats, sometime called wall sits, so consider adding those to your routine.

Consider other lifestyle changes. Smoking doesn't just increase the risk of lung cancer, it also temporarily raises blood pressure and contributes to the long-term buildup of plaque in arteries. Drinking alcohol is also linked to a greater risk of hypertension. Experts recommend limiting your intake to one drink per day for women and two for men. And public health experts also recommend maintaining a healthy weight, or losing weight if you need to, as another strategy for managing or preventing high blood pressure.

Talk to your doctor about meds. A variety of medications are available for controlling blood pressure, including diuretics, ACE inhibitors, calcium channel blockers, and angiotensin receptor blockers. You may need to try a few different drugs, or a combination of them, to find what's effective for you, Krumholz says. When to start on meds depends on several factors, but doctors generally begin considering them if your blood pressure reaches 130/80 mmHg, and they're quicker to recommend them the higher it gets from there.

CAN A SMARTWATCH MEASURE BLOOD PRESSURE?

WONDERING IF YOU can skip the home monitor and just measure your blood pressure with a smartwatch or fitness tracker? At least today, that's not a good option. Devices from major brands like Apple and Fitbit don't offer that. While Samsung devices do have the capability, the service isn't available in the U.S. yet. Still, you can find some cheap fitness trackers online that companies claim can measure BP.

It's best to avoid relying on such measurements for now, says Jordana Cohen, MD, an associate professor at the University of Pennsylvania Perelman School of Medicine. The only kinds of blood pressure monitors that are validated for accuracy (and the only ones in our ratings) are those that have an inflating cuff that tightens and relaxes around your arm or wrist, which allows the device to directly sense the pressure being exerted on your arteries by your blood.

Wearables use a different technique, generally using optical sensors to estimate blood pressure. The catch: These usually require regular measurements with a cuffed device for calibration. And as research has found with pulse oximeters, this optical technology is sometimes inaccurate in people with darker skin.

The Apple Watch has many functions, but so far it doesn't monitor blood pressure.

PHOTO: APPLE

Ratings › **Under Pressure** Many of these devices are priced at $100 or less and give you the control you need to get accurate blood pressure readings. Some can even store readings for you and a partner.

Brand + Model	Overall Score	Price	Test Results			Features									
			Accuracy	Convenience	Comfort	Irregular heartbeat detector	BP risk category indicator	Multiple user memories	Two cuffs or one that fits most	Can download memory	More portable than most	Large digit display	Data averaging function	Included cuff sizes (in.)	Available cuff sizes (in.)
ARM MONITORS															
✓ **Omron** Platinum BP5450 (Amazon)	86	$79	⇈	⇈	⌃	●	●	●	●	●		●	●	9 - 17	7 - 9
$ **Omron** Silver BP5250 (Amazon)	85	$53	⇈	⇈	⌃	●	●		●	●		●	●	9 - 17	—
✓ **Omron** 10 Series BP7450	84	$92	⇈	⇈	⌃	●	●	●	●	●		●	●	9 - 17	—
✓ **Omron** Evolv BP7000	83	$110	⇈	⌃	⌃	●	●	●	●	●	●		●	9 - 17	—
✓ **A&D Medical** UA767F	81	$52	⇈	⌃	⌃	●	●	●	●				●	8.6 - 16.5	12.2 - 17.7
✓ **Omron** 3 Series BP7100	80	$50	⇈	⌃	⌃	●			●			●		9 - 17	7 - 9
LifeSource UA-787EJ	79	$75	⇈	⌃	⌃	●	●		●			●	●	9 - 17	—
iHealth KN550BT	78	$40	⇈	⌃	⌃	●	●		●	●		●	●	8.6 - 16.5	16.5 - 18.9
Up & Up (Target) Automatic Upper Arm 48-554	76	$30	⌃	⌃	⌃	●	●	●	●			●	●	8.6 - 16.5	—
Qardio QardioArm	75	$99	⇈	!	⌃	●	●	●	●	●	●		●	8.7 - 14.6	—
A&D Medical Deluxe Connected UA-651BLE	73	$70	⌃	⌃	⌃	●	●	●		●			●	9 - 14.6	12.2 - 17.7
A&D Medical UA-611	73	$38	⌃	⌃	⌃	●	●						●	9 - 14.6	12.2 - 17.7
Withings BPM Connect	69	$100	⌃	!	⌃		●	●	●	●	●		●	9 - 17	—
iHealth Clear BPM1	68	$100	⌃	⇈	⌃	●	●	●	●	●			●	8.6 - 16.5	16.5 - 18.9
CVS Health Series 100 (Item #708884)	68	$50	⌃	⇈	⌃				●			●		8.7 - 16.5	—
HoMedics Premium Bluetooth BPA-960BT	49	$70	⌄	⌃	⌃	●	●	●	●	●		●	●	9 - 17	17 - 22
Microlife Deluxe Digital Monitor (Item #637780)	41	$50	⌄	⇈	⌃	●	●	●	●			●	●	8.7 - 16.5	—
WRIST MONITORS															
Omron 7 Series BP6350*	79	$65	⌃	⇈	⇈	●	●	●	●	●	●		●	5.3 - 8.5	—
Equate (Walmart) 4500 Series bp3kc1-3ewm*	78	$40	⌃	⌃	⇈	●	●	●	●		●		●	5.3 - 7.7	—
Omron Gold BP4350 (Amazon)*	77	$65	⌃	⇈	⇈	●	●	●	●	●	●		●	5.3 - 8.5	—
Omron 3 Series BP6100	68	$55	⌃	⌄	⇈	●	●		●		●		●	5.3 - 8.5	—
iHealth View BP7s*	49	$100	⌄	!	⌃	●	●	●	●	●	●		●	5.3 - 8.7	—
A&D Medical UB-1100*	40	$100	⌄	⌃	⇈	●	●	●	●	●	●		●	5.3 - 8.5	—
Walgreens WGNBPW-200	22	$45	⇊	⌄	⌃	●	●		●		●	●	●	5.3 - 8.4	—
Omron Healthcare Heart Guide BP8000-M*	19	$500	⇊	!	⌃	●	●	●	●	●	●		●	6.25 - 7.5	7.1 - 8.5
Up & Up (Target) Automatic Wrist BPM 48-541	17	$40	⇊	⌄	⌃	●	●	●	●		●		●	5.5 - 7.6	—

HOW WE TEST: Two trained technicians compare the results from each monitor with the results of a mercury sphygmomanometer for a variety of volunteers. Our testers also evaluate how convenient each monitor is to use, and how comfortable it feels on an arm or a wrist.

* Has a positioning indicator.

CR'S GUIDE TO

Better, Safer Drinking Water

Many Americans still drink water with unhealthy levels of toxic chemicals, heavy metals, bacteria, and other contaminants. Here's how to test yours and clean it up.

BY **LAUREN KIRCHNER** AND **KEITH FLAMER**

FIFTY YEARS AGO, Consumer Reports published a groundbreaking investigation into the nation's drinking water. Its title: "Is the Water Safe to Drink?"

The answer, for the most part, was no. Our water was often contaminated with bacteria, viruses, asbestos, and lead. Testing and treatment was inadequate. Money to fix the problem was almost nonexistent. And new concerns—including "thousands of new synthetic compounds" about which little was known—were emerging.

Later that year, the federal Safe Drinking Water Act was passed, with Consumer Reports' strong support. It was a triumph of consumer protection that authorized the new Environmental Protection Agency to set legal limits on contaminants in drinking water.

Today, while the nation's water is in many ways safer than ever, it remains vulnerable to threats old and new, says Ronnie Levin, an instructor in environmental health at the Harvard T.H. Chan School of Public Health in Boston and the lead author of a September 2023 review of U.S. water quality in the Journal of Exposure Science & Environmental Epidemiology.

Compared with half a century ago, she says, "a lot of things are better, but a lot of things, surprisingly, are not."

True, the EPA has set limits on many contaminants, like arsenic—but experts warn that those limits are often too high. We can kill pathogens in our water—but still suffer disease outbreaks when treatment falls short, and research has identified risks posed by byproducts of the disinfectants used to kill those germs. What's more, millions of Americans drink water from private wells that remain entirely unregulated.

Perhaps most alarming, we know much more about the health risks of the "thousands of synthetic compounds" that CR warned about so

PHOTO: TRUNK ARCHIVE

long ago. Especially concerning are per- and polyfluoroalkyl substances, or PFAS. These "forever chemicals" are ubiquitous in consumer products, persist both in the environment and in bodies, and have been linked to some cancers, immune problems, female infertility, and other health issues.

Almost half the nation's tap water could contain at least one of these harmful chemicals, according to a recent estimate from the U.S. Geological Survey. And tests by CR a few years ago detected PFAS in 117 of 120 water samples taken from taps across the country, with more than a third of those above a level that CR's scientists believed should be the maximum.

Also similar to 50 years ago, the EPA's ability to regulate contaminants lags behind industry's ability to develop and unleash new and potentially harmful chemicals into the environment. The agency recently proposed landmark new regulations that would limit how much certain PFAS are allowed in drinking water. But questions remain about whether the proposed limits will be strict enough to protect our health and the health of our kids.

There is also the problem that regulations alone can't solve: money. New lead pipes have been illegal since 1986—but millions of old pipes haven't been replaced, leaving the door open to crises like the one faced in Flint, Mich. Water infrastructure everywhere is crumbling faster than funds can reach it—as residents of Jackson, Miss., experienced in 2022.

Water utilities across the country are scrambling to figure out how to cover the staggering costs expected to come with eliminating PFAS and other emerging toxins from our water. When the Bipartisan Infrastructure Deal became law in November 2021, it included the largest investment in drinking water in U.S. history: $55 billion. Yet Erik Olson, senior strategic director at the Natural Resources Defense Council, calls it "basically a small down payment" on addressing America's drinking water problems.

In the meantime, you are probably wondering what you can do now to safeguard your water. In addition to making your home tap water safer, you might also want to know how to improve its taste and smell. Here is our step-by-step guide for doing just that.

WHAT ABOUT PFAS?

Not all states test for these 'forever chemicals,' so you may need to test your water yourself.

How to Check Your Drinking Water

One key outcome of the Safe Drinking Water Act was requiring water utilities not only to test water but also to make the results public. That was a game-changer in raising awareness about water quality, and has helped communities and individuals address problems as they emerged.

But those reports, called Consumer Confidence Reports, or CCRs, are far from perfect. They can be hard to get and even harder to interpret. They may include only contaminants that utilities are required to test for, which means emerging concerns, such as PFAS, can be omitted. They primarily measure contaminants in the water leaving treatment plants, not those that can enter water along the way to your home or in your home, such as lead. And they can't help at all if yours is among the estimated 23 million households that get water from a private well.

Here's how to get a fuller picture of your water quality, depending on whether you get it from a public utility or a private well.

If Your Water Comes From a Public Utility

That's most of us: Ninety percent of Americans get drinking water from one of the 148,000 public systems overseen by the EPA.

Get a copy of your water report. Despite the limitations of CCRs, start by getting a copy of your report. If you pay your own water bill, you should receive your CCR around July 1 each year. If you don't receive yours, contact your water supplier. If you rent or live in a condo, ask your landlord or building manager. You can also look for the report on the utility's website, or search for it on the EPA's website (epa.gov/ccr). Utilities serving more than 100,000 people must make them available, and some smaller ones do it voluntarily.

Make sense of your report. Focus on the summary near the top of each report that shows whether any contaminants were found above government cutoffs and, if so, what the health risks are, what is being done to fix the problem, and what you should do in the meantime. For questions, call your local supplier, or the EPA's Safe Drinking Water Hotline at 800-426-4791.

See whether the report includes PFAS. A growing list of states now require monitoring for some PFAS, and similar measures could be available soon in many other states. So check your report to see whether it includes information about PFAS.

Compare EPA cutoffs with other expert recommendations. One criticism of CCRs and the nation's approach to water safety in general is that safety thresholds are often too high. For example, the EPA's maximum contaminant level for arsenic is 10 parts per billion. But CR and other experts say tap water should have no more than 3 ppb. So check the box on page 29, which gives information about common contaminants in drinking water. You can also learn more about contaminants in your local water, as well as recommendations from the Environmental Working Group for safer levels, by typing your ZIP code into the EWG's Tap Water Database (go to ewg.org/tapwater).

Decide whether to test your tap water. Here are some factors for two common contaminants that can help you decide whether to test your water.

▶ **LEAD:** Your CCR will show an average lead level based on water taken from a limited sample of homes in your community, not specifically your home. So you may want to test even if your report doesn't show any lead. That can be an especially good idea if you live in a home or apartment built before 1986, or if there is a pregnant person or young child in your home.

PUBLIC UTILITY WATER

90 percent of Americans get drinking water from one of the 148,000 public systems overseen by the EPA.

PHOTOS, FROM LEFT: SHEILA KAY PHOTOGRAPHY; GETTY IMAGES

▶ **PFAS:** Consider testing if your report does not include information about these chemicals or if the thresholds it uses are above the levels that CR recommends (0.004 parts per trillion for PFOA and 0.02 ppt for PFOS, two compounds that raise particular concerns; 5 ppt for any other PFAS; and 10 ppt for total PFAS). Testing may make extra sense if you live near a known or suspected site that could be contaminated with PFAS; such sites can include manufacturing plants, airports, and military bases. One source for information: a map maintained by the EWG (go to ewg.org/interactive-maps/pfas_contamination).

If You Have Well Water

If you're among the minority of Americans who depend on a private well, you're largely on your own: You'll likely have to get the water tested yourself and choose what contaminants to test for. To help decide which to focus on, ask your county health department what concerns are common to your area and whether programs exist to help cover the cost.

All well-water drinkers will want to check for bacteria. If you live near farmland, nitrates—which can come from animal manure—and pesticides may be an issue. Radon—a naturally occurring radioactive gas that can get into water from soil—can be a problem in some places, so the EPA recommends you test for that too. For lead and PFAS, consider the same factors as those listed above.

The EPA recommends that well owners test their water every year. And test immediately if there are reports of contaminated groundwater in your area; if there are significant changes near your well caused by flooding, construction, or other activities; if you've replaced or repaired any part of your well system; or if you notice a change in the color, taste, or smell of your water.

CONFUSED BY YOUR WATER REPORT?
Call the EPA's Safe Drinking Water Hotline at 800-426-4791.

The Best Ways to Test

If you decide to test your tap water, here's what to do, whether it comes from a public utility or a private well.

First, be wary of the many do-it-yourself test kits sold online or in hardware stores, in which you test a sample of water in your own home without sending it to a lab. It's not always clear what they test for or how accurate they are. Instead, the EPA recommends using a certified lab (go to epa.gov/dwlabcert).

The tests can be pricey—some cost more than $500—depending on which contaminants are included in the test kit. Your health department may offer free or low-cost testing. If you need only a lead test, the nonprofit Healthy Babies Bright Futures (leadkit.hbbf.org) offers a low-cost one.

You could also try one of the mail-in kits, described at right, that CR has tested. All involve sending a sample of your water to a certified lab, and all performed well in CR's tests, though they differ in cost and what they test for.

Home Testing
The test from National Testing Laboratories can look for PFAS, lead, and other contaminants.

PHOTO: NATIONAL TESTING LABORATORIES

CR-TESTED MAIL-IN KITS

SIMPLELAB TAPSCORE
mytapscore.com
MUNICIPAL: From $160
WELL: From $195
PFAS: From $299

NATIONAL TESTING LABORATORIES
watercheck.com
MUNICIPAL: From $195
WELL: From $205
PFAS: From $499
To order, call 800-458-3330.

CYCLOPURE
cyclopure.com
PFAS: $79

NOTE: Cyclopure tests only for PFAS, but it includes more of the compounds in its standard test than the other two, is easier to perform, and costs less.

WHAT SHOULDN'T BE IN YOUR WATER

The Environmental Protection Agency regulates about 90 contaminants. Some are familiar, such as E. coli and lead. Others are not: Who ever heard of pentachlorophenol, a type of "discharge from wood-preserving factories"?

The EPA has set limits for how much of each can be in drinking water. But Kelly Hunter Foster, senior attorney at the Waterkeeper Alliance, says those can be higher than recommended for protecting health. For example, the "public health goal" is zero for benzene. But the EPA allows drinking water to have 0.05 parts per million of that chemical. The Environmental Working Group lists the federal legal limit for the compounds, plus its lower recommended levels, at ewg.org/tapwater/ewg-standards.php.

At right, we've broken contaminants into groups and describe how they get into water, and how they can affect your health in the short and long term. We also provide information about some contaminants, such as PFAS, that aren't yet federally regulated.

REGULATED

Microorganisms

EXAMPLES: *Giardia lamblia, E. coli, Legionella.*

HOW DO THEY GET INTO WATER? Improperly treated human waste and animal manure. Small, remote areas are more likely to have challenges because of insufficient resources and because the farther water must travel to its destination, the more the disinfectants used to treat it may lose their potency.

WHAT ARE THE RISKS? Gastrointestinal illness, Legionnaires' disease.

Disinfection Byproducts

EXAMPLES: *bromate, haloacetic acids, trihalomethanes.*

HOW DO THEY GET INTO WATER? Chlorine and other disinfectants used to treat water can interact with organic matter to produce other toxic chemicals. Certain byproducts, while less harmful in the short term than bacteria, can be a risk to health over a long period of exposure.

WHAT ARE THE RISKS? Bladder cancer, liver and kidney problems, anemia, reproductive effects.

Heavy Metals

EXAMPLES: *lead, copper, arsenic, mercury.*

HOW DO THEY GET INTO WATER? Lead and copper can leach from pipes going into a building, or from plumbing and fixtures inside. Arsenic and mercury occur naturally and are made more prevalent by industrial manufacturing waste.

WHAT ARE THE RISKS? High blood pressure, kidney and liver damage for adults, learning deficits and developmental harm to infants and children.

Nutrient Pollution

EXAMPLES: *nitrate, nitrite.*

HOW DO THEY GET INTO WATER? Excess nitrogen and phosphorous come from fertilizers, detergents, animal manure, cars, sewage plants, and other sources, and can trigger algae blooms that can be toxic to wildlife and humans.

WHAT ARE THE RISKS? A blood disorder called "blue baby syndrome" in infants.

Pesticides & Herbicides

EXAMPLES: *alachlor, atrazine, glyphosate.*

HOW DO THEY GET INTO WATER? The chemicals mostly come from the runoff of agricultural sites. Small amounts from individual home use, improperly disposed of, can also add up.

WHAT ARE THE RISKS? Cardiovascular and kidney problems, reproductive difficulties.

Radioactive Material

EXAMPLES: *alpha/photon emitters, beta photon emitters, radium, uranium.*

HOW DO THEY GET INTO WATER? These materials come from the erosion of natural deposits of radioactive minerals, as well as emissions and waste from the nuclear energy industry.

WHAT ARE THE RISKS? Cancer, kidney damage.

UNREGULATED

PFAS

EXAMPLES: *PFOA, PFOS, and thousands of related chemicals that make products nonstick, water-resistant, and more.*

HOW DO THEY GET INTO WATER? Industrial waste, recycled human waste used as fertilizer on farms, and waste from countless consumer products. Some states mandate testing and treatment of some PFAS, but federal limits are pending.

WHAT ARE THE RISKS? Cancer, fertility issues, developmental problems, endocrine disruption, high cholesterol.

Microplastics

EXAMPLES: *tiny particles of plastic, some visible only by microscope.*

HOW DO THEY GET INTO WATER? Plastic products come apart with use and time, breaking into ever tinier fragments, which can make their way into lakes, rivers, and oceans. Plastic fibers even wash off of clothes into our water supplies.

WHAT ARE THE RISKS? No scientific consensus, but may be linked to inflammation and increased exposure to chemicals that can disrupt hormones.

Other Contaminants

Pharmaceuticals, fracking-related contaminants, cyanotoxins (from blue-green algae), perchlorate (also known as rocket fuel), and 6PPD-quinone (from road tires) are just a few of the contaminants that many experts say could be getting into our water and harming our health but are not currently regulated at the federal level.

Water Trouble? What to Do.

If your local water report (the CCR) reveals contamination or your water test comes back with alarming results, how concerned should you be, and how quickly do you need to act? That depends on what you find.

If the test shows bacteria—such as E. coli or Legionella–contact your health department right away for help interpreting the results. Depending on what type of bacteria the test finds, you may need to stop drinking the water entirely until it has been treated. That's especially important if there are people in your household who are vulnerable because they are elderly, very young, or pregnant.

For lead, take kids who have been drinking the water to a doctor to check for high blood levels of this heavy metal. Consider doing this for adults too. Next steps depend on blood levels.

While PFAS in your water is alarming, testing your blood is not routinely recommended. For one thing, those tests are hard to find, expensive, and limited in the number of PFAS they test for, and they won't tell you whether your health has been or will be affected. And like many other contaminants, PFAS pose long-term rather than immediate health risks. So the best advice is to continue routine health checkups with your doctor while trying to avoid additional exposure.

Whatever the contaminant, also contact your public water utility and health department to let them know what you've found so that they can investigate and coordinate a fix, says Erik Olson at the Natural Resources Defense Council. If the utilities aren't responsive, contact your elected officials to put the pressure on.

Whether what you've found is potentially harmful to your health or just makes your water look, taste, or smell bad, there are steps you can take to get the contaminants out of your water, starting by using a filter.

THE PROBLEM WITH BOTTLED WATER

AMERICANS DRINK some 15 billion gallons of bottled water each year—around 45 gallons per person, according to the International Bottled Water Association. While many people may buy bottled water out of convenience when they're on the go, others may believe it's safer than tap water. Bottled water often undergoes some kind of filtering before being sold, so it can be a good idea if you know your tap water is contaminated, at least until you have addressed the problem through filters or another solution.

Still, bottled water is not a good long-term solution, for several reasons. First, there have been periodic reports, including from CR, of some bottled waters testing positive for heavy metals, PFAS, and other contaminants.

And aside from potential concerns about the purity of the water itself, the fact that bottled water is typically packaged in plastic is problematic. Polyethylene terephthalate (PET), the kind of plastic used in many water bottles, can leach toxic things such as antimony, bisphenols, phthalates, and microplastics into the beverages inside.

Also concerning: The manufacturing and disposal of the plastic in all those water bottles is a major source of many of the chemicals that ultimately end up in, and contaminate, our drinking water.

"If people have concerns about their municipal drinking water, they should also know that a lot of that is because of industrial contamination, and the plastic industry is actually a really big contributor to that," says Roopa Krithivasan, director of research at Defend Our Health, an environmental health advocacy group.

When you need water on the go, you're better off filling a reusable glass or stainless steel water bottle with tap water.

IF YOU DRINK BOTTLED WATER, THERE ARE WAYS TO DO IT MORE SAFELY

▶ **Don't reuse single-use bottles.** These break down more quickly than sturdier plastic bottles that are meant to be reused, and studies suggest that this microscopic damage can shed microplastics, says Susan Richardson, chemistry professor at the University of South Carolina.

▶ **Don't let plastic water bottles get too hot.** High heat can damage plastic and lead to chemicals leaching into water, especially when exposed for extended periods, Krithivasan says. So Krithivasan recommends that you not store water bottles in vehicles.

▶ **Look for purified bottled water,** CR's experts say. That typically indicates that the water has undergone filtration before being bottled.

PHOTOS, CLOCKWISE FROM LEFT: GETTY IMAGES (3); CONSUMER REPORTS

Pick a Filter–but Not Just Any Filter

Whatever your water problem is–a bad smell or taste from something like sulfur, an immediate health risk from bacteria or viruses, or a long-term potential health threat from PFAS, lead, or many other contaminants–there's a filter that can fix it.

"Don't panic," says Eric Yeggy, director of technical affairs at the Water Quality Association. "There are really simple, in-home treatment solutions for virtually every water problem that you're likely to encounter."

But the trick is to find one that works for your specific problem. And that's not always easy.

For one thing, you can't necessarily trust the marketing claims that filter manufacturers make when it comes to contaminant removal. The specific words they use in those claims matter, and the differences can be subtle.

For example, the only guarantee that a filter removes a specific contaminant is certification by a reputable third-party organization–such as the National Sanitation Foundation (NSF), Water Quality Association (WQA), Canadian Standards Association (CSA), or International Association of Plumbing & Mechanical Officials (IAPMO).

Some companies may advertise that a product was "tested to" or "meets" a standard from one of those groups. But that's very different from being "certified by" one of them.

Here's why: "Certified by" water filters are monitored and subjected to extensive, long-term testing to see how they perform over extended periods. On the other hand, products that are "tested to" those standards may have undergone only a short-term test, and by a lab with uncertain qualifications. So it's important to verify that any water filter you choose is certified by a trusted organization such as the NSF, WQA, CSA, or IAPMO.

Next, make sure you choose the type of filter that fits your needs and your budget. There are several types to choose from. They include whole-home filtering systems, which will filter the water soon after it enters your home; under-sink and countertop versions, which work on individual sinks or faucets; and water pitchers.

Filters use one or more technologies: mineral-removing ion exchange units, reverse osmosis, bacteria-killing distillation, virus and bacteria-disinfecting ultraviolet light, and, most commonly, contaminant-absorbing activated carbon blockers.

Another important consideration is maintenance, Yeggy says. Filters are certified to handle a specific quantity of water over their life span, and they really can get "full" of the contaminants that they filter out. So it can be helpful to buy filters that indicate when replacement is needed.

Or, if you hire a professional to install a system, ask what maintenance is required and how much it costs. That's important because those costs can add up, fast. And, yes, the filter cartridges in countertop pitchers really do need to be changed as often as the manufacturer says they do.

FLUSH YOUR TAPS

Let your water run for at least 10 seconds before drinking when taps have been shut for several hours. That can flush bacteria or lead that may have accumulated.

FILTERS THAT WORK BEST

All the filters here are rated on their ability in CR's tests to reduce unpleasant tastes and odors, how freely water flows through them, and how long they work before clogging. We also note whether a filter is certified to reduce chlorine, lead, or PFAS, and whether it includes a filter-life indicator. Finally, we show the cost of replacing its filter or cartridges for a year. *(Note that CR does not test whole-house water filtration systems, which can cost thousands of dollars and are customized to each home.)*

Brand + Model	Overall Score	Price	Test Results			Features				
			Flavor and odor reduction	Flow rate	Clogging	Filter-life indicator	Cost/year	Certified for PFAS reduction	Certified for lead reduction	Certified for chlorine reduction
WATER FILTER PITCHERS **COST:** $20 to $110			These are an easy option for people who are on a budget or renting an apartment. Unlike some other types, they don't filter water instantly: Water flows through an internal cartridge that cleanses it slowly while the pitcher sits. Most filter pitchers tested by CR have been certified to reduce chlorine, but only one is certified to reduce lead and PFAS. We found that most do a good job of improving taste and odor but that some can be prone to clogging.							
✓ **Brita** Stream Rapids OB55	81	$56	▲	▲▲	▲▲		$32			●
Kirkland Signature (Costco) Water Filtration System	69	$25	▲	▲▲	▲▲	●	$16			●
Pur Basic PPT700W	67	$20	▲	!	!		$30			●
ZeroWater Ready-Pour ZD-010RP	67	$36	▲	▲	▲▲		$78	●	●	●
Soma Water Filter Pitcher	45	$45	▼	▲	▲▲		$60			
Clear$_2$O GRP200	38	$37	▲	▼▼	▼▼	●	$44			
FAUCET-MOUNTED FILTERS **COST:** $15 to $80			These devices, which use carbon-block filters, screw onto the end of your faucet. They're an economical choice for apartment dwellers or people who want to filter water from more than one faucet. But they can be bulky, and they do not fit all faucets. Several models CR tested are certified to filter out lead and chlorine, but only one is certified to remove PFAS. We found most to be very effective in removing bad taste and odor.							
✓ **ZeroWater** ExtremeLife ZFM-400CR	72	$45	▲	▲	▲▲	●	$36	●		●
$ **Pur** FM-3333B	68	$25	▲	▼	▲▲	●	$61		●	●
$ **Brita** Basic SAFF-100	66	$25	▲	▲	▲	●	$57		●	●
Culligan FM-15A	51	$30	▲	!	▼▼		$86		●	●
Crystal Quest CQE-FM-00501	41	$40	!	▲▲	▼▼		$59			

PHOTO: GETTY IMAGES

Brand + Model	Overall Score	Price	Test Results			Features				
			Flavor and odor reduction	Flow rate	Clogging	Filter-life indicator	Cost/year	Certified for PFAS reduction	Certified for lead reduction	Certified for chlorine reduction

COUNTERTOP WATER FILTERS

COST: $101 to $217

These attach to your faucet, and usually divert water through a small unit equipped with a spout. Installation is easy (just remove the faucet aerator and screw the filter onto the faucet), but they take up space on your countertop. Basic models, and most tested by CR, use carbon filtration to reduce impurities such as chlorine, as well as funky tastes and odors. More costly units, such as the model from Amway, use reverse osmosis or ultraviolet technology that can guard against more serious contaminants such as heavy metals, PFAS, or bacteria.

$	**Home Master** TMJRF2 Jr F2 Elite	84	$95	⌃	⌃⌃	⌃⌃		$112			
$	**Apex** MR 1050	81	$85	⌃	⌃⌃	⌃⌃		$86			
✓	**Amway** eSpring 10-0188	79	$1,179	⌃	⌃⌃	⌃⌃	●	$259	●	●	●
	Matterhorn MCT-8050CL	75	$100	⌃	⌃⌃	I		$98			
	Pelican Water Systems PDF-450W-P	49	$45	⌃	⌄⌄	⌄⌄	●	$145		●	●

UNDER-SINK FILTERS

COST: $85 to $150

These connect to the water line under your sink and usually include a separate faucet to dispense filtered water. They use single or multistage carbon blocks, polypropylene filters, or reverse osmosis technology, which can add hundreds of dollars to the cost. Many of the under-sink filters tested by CR are certified to reduce lead, chlorine, PFAS, and other contaminants, and all get high scores for improving taste and odor. They typically require a plumber to install.

✓	**Multipure** Aquaversa MP750	87	$500	⌃⌃	⌃⌃	⌃⌃		$90		●	●
✓	**Brondell** Coral UC300 Three Stage	86	$190	⌃⌃	⌃	⌃⌃	●	$100	●	●	●
✓	**Culligan** US-EZ-4	83	$100	⌃⌃	⌃	⌃⌃	●	$98	●	●	●
	Everpure H-1200 EV9282-00	80	$685	⌃⌃	I	⌃⌃	●	$157	●	●	●
	Aquasana AQ-5200	76	$125	⌃⌃	I	⌃⌃	●	$120	●	●	●
	Aqua-Pure by Cuno AP-DWS1000	74	$300	⌃	I	⌃	●	$100		●	●

HOW WE TEST: Overall Score is based on the performance of the filter in all our tests. **Flavor and odor reduction** reflects how effective it is at removing compounds that can make water taste or smell like damp soil, a swimming pool, metal, or sewage. **Flow rate** indicates how long it takes for a given amount of water to pass through the filter. **Clogging** reflects how much a filter's flow rate slows with use. We also check to determine whether each filter is certified by a reputable third-party organization for contaminant reduction.

THE RIGHT Lights FOR YOUR HOME

From the darkest hallways to the dimmest countertops, here's how to brighten every space in your house for safer, more beautiful surroundings. Plus: What you need to know about LEDs.

by Michael Frank

HAVE YOU EVER sat in your living room squinting over a crossword puzzle, noticed midafternoon that your morning shave missed half your chin, or struggled to find your way to the bathroom at night? If the answer is yes, you might need some better lighting around the house. Creating a safer, more functional plan can be as easy as replacing or moving a few fixtures (such as lamps, pendants, and sconces), and we'll tell you which ones to put where. But to get the best effect from those fixtures, you'll also need the right lightbulbs. So that's where we'll start—because the technology has changed a lot in recent years.

You remember the easy old days: Buying a lightbulb meant choosing an incandescent one with about 25 to 100 watts, depending on how bright you wanted the light to be and the fixture you were putting it in. You might go to a specialty lighting store to find fancy candle-style bulbs for a chandelier or a floodlight for your porch, but your choices were pretty limited, and so was the need to understand lighting minutiae.

What's different today is that the introduction of energy-saving LEDs—which use 75 percent less electricity than incandescents—and 2022 Department of Energy guidelines to phase out incandescent technology mean we all have to learn a new vocabulary so that we know what to buy and how to shop.

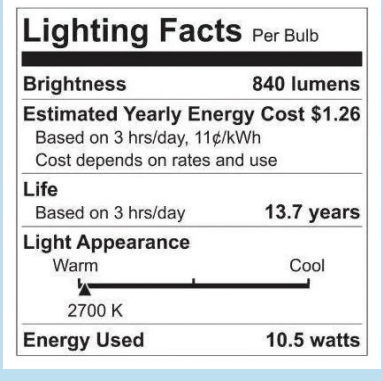
Read on for everything you need to find energy-saving LED bulbs that look great and last for years in some cases—and for the smartest lighting strategies and fixtures for every room in your home.

PHOTO: ERIC BJERKE, SR./GETTY IMAGES

The New Basics of Bulbs

THE KEY DIFFERENCE between the incandescent bulb Thomas Edison invented in the late 1800s and today's LED bulb is how each converts energy into light. Think of incandescent technology this way: When you put a piece of metal into a bonfire, the fire makes it glow—and the filament inside an incandescent bulb does much the same thing. Exposure to electric current makes it glow, creating light. It also gets very hot. In fact, nearly 90 percent of its energy is wasted as heat, not light.

The guts of an LED bulb are more akin to a grouping of tiny electronic semiconductors illuminated by the movement of electrons across their surface. Your flat-screen TV consists of thousands of mini LEDs. These throw off almost no heat: About 90 percent of their energy gets converted to light. That means a 60-watt incandescent can be replaced by an LED that uses less than 10 watts, which is great for your electric bills. But if you want attractive lighting with the familiar look of incandescents, you'll need to shop in a slightly different way. Here's how.



Check the Label You'll find this label on all LED packages. Use it to pick a bulb with the brightness and appearance you want, and to see how much energy it uses.

Begin With Brightness

Many of us chose incandescent bulbs by wattage and thought of the number of watts as an indication of brightness. A 100-watt incandescent bulb looks much brighter than a 40-watt incandescent. Wattage is actually a metric of energy, and the light intensity that energy produces is measured in lumens. That's the term to look for on an LED package: The higher the lumen count, the brighter the bulb. To put things in perspective, a 100-watt incandescent bulb puts out 1,600 lumens, so when shopping for a replacement LED you want that lumen count. (Many LED packages now say "60W replacement," etc., to simplify this.)

Think About the Effect You Want

You've probably noticed that some lighting sources look "warm" (more yellow or amber) or "cool" (more blue or gray). Incandescent lightbulb packages often described these styles as "soft white" or "daylight." You might see those same terms on LED lightbulb packages today. But Terry McGowan, a lighting engineer who worked for GE on major lighting projects and is now director of engineering for the American Lighting Association, says there's a better way to get the effect you want.

Lighting hue is graded by the Kelvin scale—the lower the Kelvin number, the warmer the lighting will appear—and LED labels (like the one on the left) display this scale. For a warm incandescent look, go with 2,700 or 3,000 Kelvin, McGowan says—and ignore labels like "warm white" and "soft white." "Those terms are descriptive, but manufacturers may have different definitions of them," he says. The Kelvin scale should be consistent across products and brands.

If you want to get a little more advanced, smart technology lets you change the appearance of your lighting at will. So-called "tunable white" smart bulbs (like the WiZ bulb, on the facing page) pair to a phone-based app or other systems so that you can adjust the hue between the cooler white that's ideal for daytime task lighting and a cozier one for evenings.

You can even automate smart bulbs to change hue throughout the day, emulating the sun. Jennifer Brons, the program director at Mount Sinai Hospital's Light and Health Research Center outside of Albany, N.Y., says that having lighting on a consistent daily pattern is crucial for consistent sleep. "Bright in the day and dim at night is what matters most," she says, which is why programmable tunable white lights can be handy.

Another thing to know: Some LEDs can make colors look "off." McGowan explains that lower-quality LEDs can make everything in a room look flat, so vibrant colors appear much duller than they actually are. Better LEDs have what's called a higher Color Rendering Index (CRI), indicated on a scale from 1 to 100, which measures how accurately a bulb illuminates. "Go with 90 or 95 CRI if you can find it," says Marty Schmidt, the brand director for System 7, a Boston-based home lighting company. Not all LED packages note the bulb's CRI number, McGowan says, so you may have to search for the product

How Bright Is That LED? Use the number of lumens to find the right replacements for your incandescent bulbs.

	250 LUMENS	450 LUMENS	800 LUMENS	1100 LUMENS	1600 LUMENS
INCANDESCENT	25 WATTS	40 WATTS	60 WATTS	75 WATTS	100 WATTS
ENERGY STAR LED	2-3 WATTS	4-6 WATTS	8-10 WATTS	10-13 WATTS	13-16 WATTS

Wattage and lumen values courtesy of GE Lighting

Why Kelvins Matter The Kelvin number (K) indicates how warm (yellow) or cool (blue/gray) the light appears. There's no "right" choice, says Marty Schmidt of System 7. He notes that brighter, whiter light can help you see better in spaces where you want to feel alert and energized, while you might prefer a warmer light for more relaxing areas.

2000 K	2700 K	3000 K	3500 K	4000 K	5000 K	6000 K	6500 K	8000 K	10000 K

WARM — NEUTRAL — COOL

online to get that information. Higher CRI bulbs may cost a little more because they require more complex technology to reach those higher levels of accuracy.

Finally, decide whether you want dimmable bulbs. Not all LEDs dim well. Unlike incandescents, which naturally emit a warm, amber light when lowered, LEDs "can look both kind of gray and also bluer," McGowan says. So check for the word "dimmable" on the label, and shop for what's called "dim-to-warm," which indicates an LED made to emulate that incandescent yellow-orange candlelight-type glow. One caveat: Some LEDs only work with certain kinds of dimmers. (The manufacturer's website should have that information.) Don't know what dimmer you already have? You could buy a dim-to-warm LED and try it out. Keep your receipt: If it doesn't dim well or makes a noise, you may have to return it and try again.

PHOTOS: GETTY IMAGES (ROOM); MANUFACTURERS

Look for Long-Lasting Performance

According to the Department of Energy, LEDs should last up to 25 times longer than equivalent incandescents. But your mileage may vary. McGowan suggests reading the warranty of any bulb. For instance, the GE Sunfilled bulbs shown at right are labeled as having 13.7 years of life, but that's based on 3 hours of use per day. The warranty they carry is for three years, not 13. WiZ smart bulbs—$11 each—also have a three-year warranty. One bonus: Depending on where you live, your utility company may offer in-store or coupon discounts on bulbs through the federal government's Energy Star system. You can go to energystar.gov to find these offers and also filter the bulbs you find for lumens, CRI, and dimmability.

As for disposal, LEDs should be recycled. Some stores, like Home Depot, as well as local recycling centers have programs in place. Find more by searching for "LED lightbulb" on earth911.com.

As your eyes age, the muscles that control the pupils get weaker and the lenses get thicker. That can increase the need for brighter light.

SOME GOOD LED CHOICES

These bulbs check the boxes for high-quality light, as explained by the experts we consulted. Shopping tip: For consistent color temperature and CRI (illumination), it's best to stick with one brand throughout your whole house. Also, some LEDs have a dual-prong socket. There are inexpensive adapters you can buy to help fit your fixtures.

SOFT, WARM LIGHT FOR TABLE AND FLOOR LAMPS

GE 60W Sunfilled A19 Soft White, $11, target.com

840 LUMENS, DIMMABLE, 2700K, 97 CRI

BRIGHT, COOL LIGHT FOR WORK AREAS

Cree Lighting A19 100W Equivalent LED, $9, amazon.com

1600 LUMENS, DIMMABLE, 5000K, 90+ CRI

BEST TUNABLE SMART BULB

WiZ Smart Wi-Fi Connected LED 60-Watt A19 Smart Bulb, Frosted Color & Tunable White, E26 Medium Base, $11, wizconnected.com

800 LUMENS, DIMMABLE, 2700-6500K, 90 CRI

Note: The spectrum above, based on one provided by Philips Lighting, shows the general effects of different color temperature lighting, not the exact appearance of each Kelvin level.

Your Room-by-Room Lighting Plan

Every space needs both overall brightness and focused light that lets you see well in a specific area. Using a combination of the fixtures below can help you create these "layers" of light (see "Get the Right Mix" on the facing page).

Find Your Fixtures

1 Recessed Lighting
Sometimes called "can" lights, these appear flush with the ceiling and provide overall illumination. Today's LED versions can be tiny and unobtrusive. Some come as a single integrated unit (instead of a housing and a removable bulb). Marty Schmidt of System 7, a home lighting company, says to be sure to choose models with replaceable components in case something breaks. If you don't already have recessed lights, you'll need an electrician to install them, at a cost of about $200 and up per fixture.

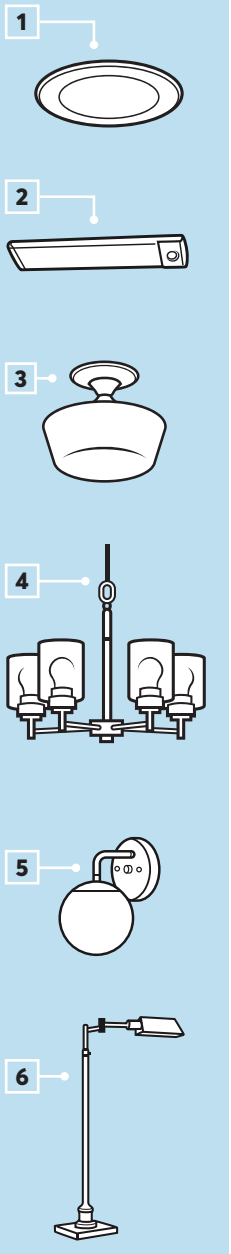
2 Undercabinet Fixtures
Mounted beneath upper cabinets, they brighten countertop work areas. Choose hardwired or plug-in LED strips, or low-profile LEDs that mount with double-sided tape.

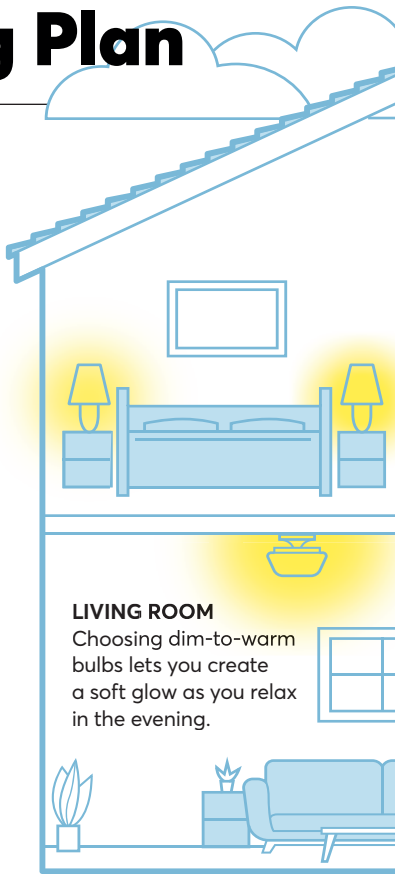
3 Ceiling Fixtures (Flush, Semi-Flush, Pendant)
These are variations on a theme. An enclosed or semi-enclosed light source, often with a globe, drum, or ornamental surround, sits flush against the ceiling, extends on a rod, or hangs on a cord. They typically provide overall brightness. Pendants hung above a kitchen island or table can also offer task lighting or add decorative impact. Pro tip: Choose a pendant with a frosted globe to avoid the glare of a bare bulb.

4 Chandeliers
A multilight unit is a classic choice above a dining room table, and because LEDs offer exceptional miniaturization, you can now find many sleek, sculptural styles. Dimmability is a must.

5 Sconces
Wall-mounted lighting bounces light to walls and ceilings for overall illumination or to highlight a design feature.

6 Table and Floor Lamps
A lamp with a fabric shade will cast light up, down, and even to the sides (if the shade is light in color). A style with an upturned bowl-like shade (an "uplight") can create a pool of illumination on the ceiling. And a style with an articulated arm can offer just the light you need for reading, writing, or project work.





Get the Right Mix

Kitchen:
Here you'll need plenty of overall brightness, accented with focused task lighting on surfaces (counters, cooktop, sink) for the work of meal prep and cleanup. Achieve these lighting layers by using either existing or replacement recessed, flush, semi-flush, or pendant ceiling fixtures, updated with 2,700 or 3,000 Kelvin LED bulbs. Then add undercabinet LED task strips in a Kelvin of 4,000 or above for sharper acuity.

PHOTOS: MANUFACTURERS

EASY FIXES FOR 4 TRICKY SPOTS

The right fixture can eliminate annoying dark zones.

If you're struggling to read in a dim living room ...

Fixture fix: Replace a basic table lamp with one that has a reading arm you can direct toward your lap, or add a floor lamp beside your chair.

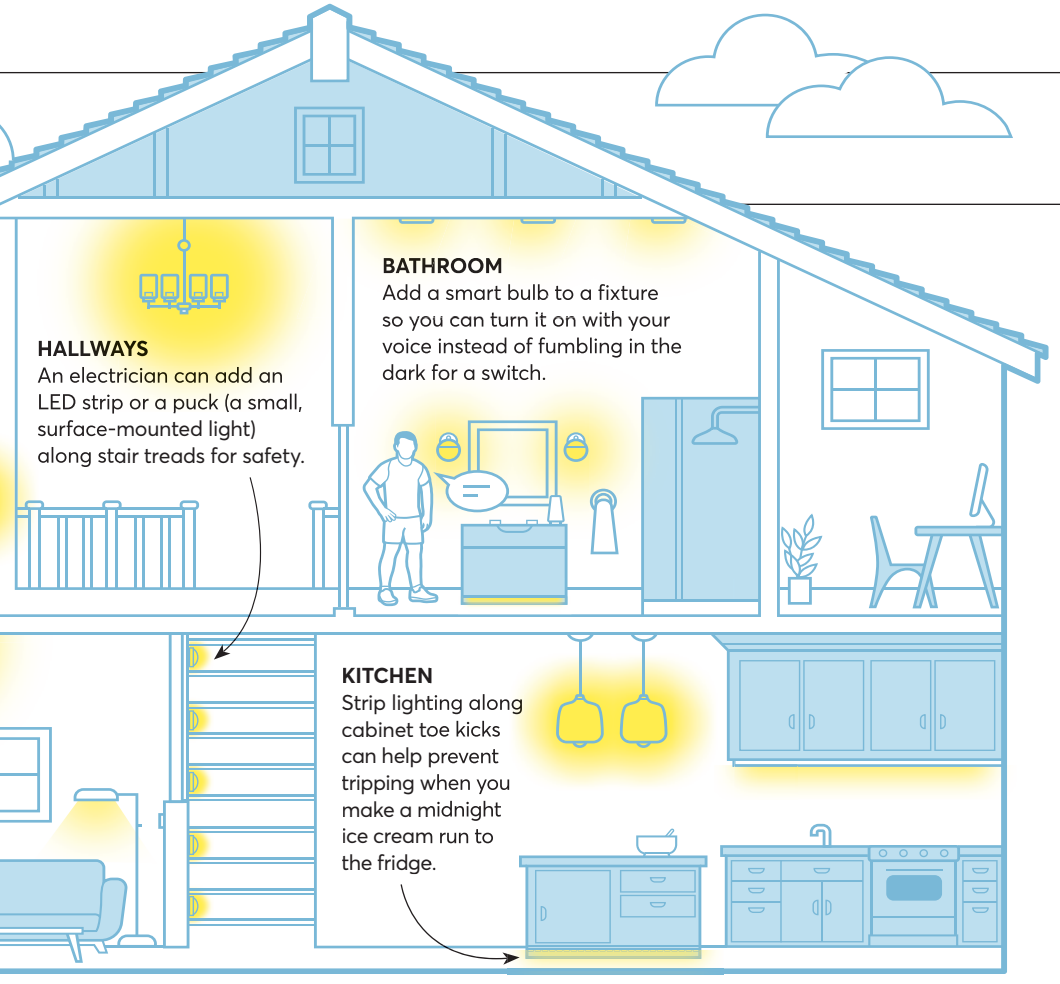
Possini Euro Deacon Bronze Gooseneck Desk Lamp with USB Port $190, lampsplus.com

If you can barely see the veggies you're chopping ...

Fixture fix: Install a battery-operated strip light beneath your upper cabinets.

Lepotec 30-LED Motion Sensor Cabinet Lights $26, amazon.com

ILLUSTRATIONS BY T.M. DETWILER


HALLWAYS
An electrician can add an LED strip or a puck (a small, surface-mounted light) along stair treads for safety.
BATHROOM
Add a smart bulb to a fixture so you can turn it on with your voice instead of fumbling in the dark for a switch.
KITCHEN
Strip lighting along cabinet toe kicks can help prevent tripping when you make a midnight ice cream run to the fridge.

Bathrooms: Provide general illumination with overhead fixtures so you can see well in the whole room (including inside the shower and above the tub), then add extra lighting at the vanity for grooming. A pair of frosted-glass sconces on either side of the mirror—or a mirror with a built-in LED "frame" like the one below—will do the trick. If you're calling in an electrician, consider adding LED strip lighting to the toe kick at the base of a sink cabinet to illuminate the floor. If it's on its own switch, you can just turn on the kick light at night for safety without glare. When choosing bulbs, stick with a Kelvin number of either 3,000 or 2,700. Schmidt says your choice depends on your complexion and what hue you prefer for applying makeup, shaving, and other grooming tasks. For intensity, especially for the mirror surround, you'll probably want between 1,200 and 1,600 lumens, depending on personal preference.

Hallways and Staircases: Stairs and hallways can be dangerous without adequate illumination, particularly at night. Jennifer Brons of the Light and Health Research Center also says that no one's eyes adjust quickly from full darkness to bright light, so motion sensor lighting isn't ideal in this area. Instead, plan lighting that's ample but not too glaring. Think shaded wall sconces, table lamps, and night lights placed throughout the space.

Living Room/Family Room: There's a paradox to these areas, Brons says. You want to create ambience—people tend to like warmth without brightness in rooms where they relax—but you also need greater light intensity for tasks like reading. Schmidt recommends tackling this with table and floor lamps that cast light up to ceilings and walls as well as at your lap for reading or hobby work. To create a cozier vibe, try experimenting with Kelvin temperatures as low as 1,800. The lumen count you'll need will vary because a room with only sconces and table and floor lamps could still be bright enough if each fixture uses higher lumen bulbs, while more light sources enables lowering the lumen production of select fixtures.

Bedrooms: You're here to sleep. To encourage that, you want bulbs with Kelvin numbers in the range of 1,700 to 1,800, ideally at a relatively dim 600 lumens or so. In a bedside table lamp, that's enough warm light for bedtime reading at a temperature that encourages rest. Brons says not to sleep with the lights on, either. "Our eyelids are translucent, so they do allow light penetration," she says. If you're worried about getting out of bed in the middle of the night, it's better for sleep to have plug-in night lights in the hallway or bath than leaving a bedside lamp switched on.

If your dining room feels cold and uninviting ...

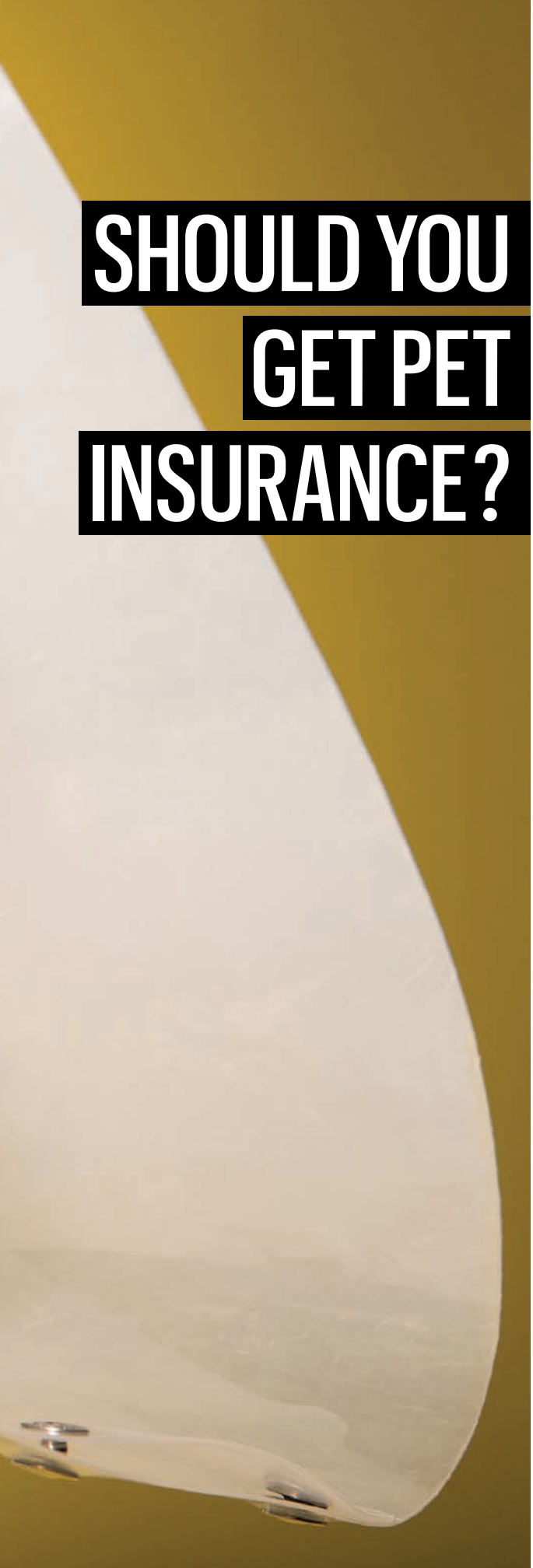
Fixture fix: Hang a dimmable chandelier (and be sure to choose dimmable LED bulbs).

LNC Concise 8-Light Rustic Matte Black Modern/Contemporary LED Dry-Rated Chandelier $166, lowes.com

If you can't seem to shave evenly these days ...

Fixture fix: Swap your basic bathroom mirror for one with an LED border that helps you see what you're doing—from all sides.

Amirie Bathroom LED Frameless Anti-Fog Illuminated Vanity Mirror $180, wayfair.com



SHOULD YOU GET PET INSURANCE?

Vet fees are rising. Is pet coverage worth the monthly cost? We've got answers, plus ratings of insurance companies. BY BRIAN VINES

DESPITE HAVING BOTH A DOG AND A CAT, in my household pet insurance has long been on the maybe-we-should-look-into-it list, along with getting faster internet. But our lassitude was called into question early one evening when Phoebe, our 3-year-old cat, showed up at the back door disoriented, limping, and with a nickel-sized bald spot on her left hind quarter. I was concerned, but also worried things were about to get expensive.

Turns out most of the tens of millions of cat- or dog-owning households in the U.S. don't insure them, either. According to the North American Pet Health Insurance Association, in 2022 just 4.8 million cats and dogs were insured in this country. In a first-ever evaluation for Consumer Reports, we rated eight pet insurers—ASPCA, Banfield, Embrace, Fetch, Healthy Paws, Nationwide Pet Insurance, Pets Best, and Trupanion—based on a survey of 2,061 CR members with insured pets.

What we found: Many pet owners aren't too happy with their coverage. Of the eight pet insurance providers we looked at, six earned a middling score for overall satisfaction and two bottomed out with unfavorable ratings.

To be sure, pet coverage is a mixed breed. It has some similarities to human health insurance, because the majority of plans have premiums, deductibles, and copays. But pet policies vary more in what they will cover or won't, with not all pet insurers covering the same suite of possible veterinary needs in their basic packages.

Because of this, pet insurance can be complicated from a comparison-shopping point of view. For example, the plan Trupanion offers covers illness, injuries, surgery, hospital stays, medications, and advanced dentistry. But Liberty Mutual, which was not in our survey, is more à la carte, offering plans that cover only accidental injuries, or only accidents and illness, or ones that cover all that plus wellness (preventative) care. Banfield Pet Hospital plans, which are more like a veterinary flexible spending account, cover wellness care only.

Brian Vines, shown with his cat Phoebe, is deputy editor of special projects at Consumer Reports.

Shopping for Coverage

If you're thinking about getting pet insurance, there are a number of considerations to weigh: what the plans cover, what they cost, and how well they reimburse. In addition, there are other important aspects of pet insurance to know about.

1 **Preexisting conditions are typically not covered.** A preexisting condition is any illness or injury that predates the start of an insurance policy, classified as incurable like cancer and diabetes or curable like a broken bone. Insurers may ask to see your pet's medical records before enrollment. Or they may impose waiting periods up to 12 months before coverage starts.

2 **There are age cutoffs, too.** While a pet's age factors into the price of the premium, some companies will not extend new policies to pets over a certain age. Of the eight carriers ranked by CR, only four—ASPCA, Banfield, Fetch, and Pets Best—have no age limits. Major medical at Nationwide is restricted to dogs 10 years old and younger, and the other carriers have age policies that vary depending on the type of coverage.

3 **The cost of premiums, copays, and deductibles can add up.** Premium price is based on the type of coverage you choose, where you live, the kind of pet you have, and its age. In our survey, the typical premium cost was $47 per month per pet. Trupanion was highest at $63 a month and Pets Best was lowest at $42—a small difference but one that comes to roughly $252 a year. Depending on the plan you choose, deductibles can range from $0 to $1,000 or more, and copays (the fixed percentage of a vet bill you must pay out of pocket) are typically 20 percent.

4 **There are usually annual caps.** Pet insurers typically impose annual limits on how much they will pay out on an individual animal's coverage. If you hit your annual limit, it will be your responsibility to pay out of pocket for vet care. With ASPCA, you can choose annual caps ranging from $2,500 to unlimited. Nationwide gives you the option of electing annual maximums of $5,000, $7,500, $10,000, and even unlimited, depending on the plan.

5 **You typically need to pay providers directly, then get reimbursed.** This means you must have the ability to pay the vet bill at the point of service and then file a claim for reimbursement with the insurance company.

6 **Insurers that reimbursed the most:** More than half (55 percent) of CR's respondents said they received full reimbursement for the most recent claim submitted over the past 12 months. An additional 21 percent received partial reimbursement. Embrace Pet Insurance delivered the highest level of complete reimbursements, paying in full on 86 percent of claims, followed by Banfield (84 percent) and Trupanion (79 percent). But Pets Best and Nationwide Pet Insurance appeared less likely to fully reimburse on the most recent claims filed, with 63 and 61 percent reimbursement rates, respectively.

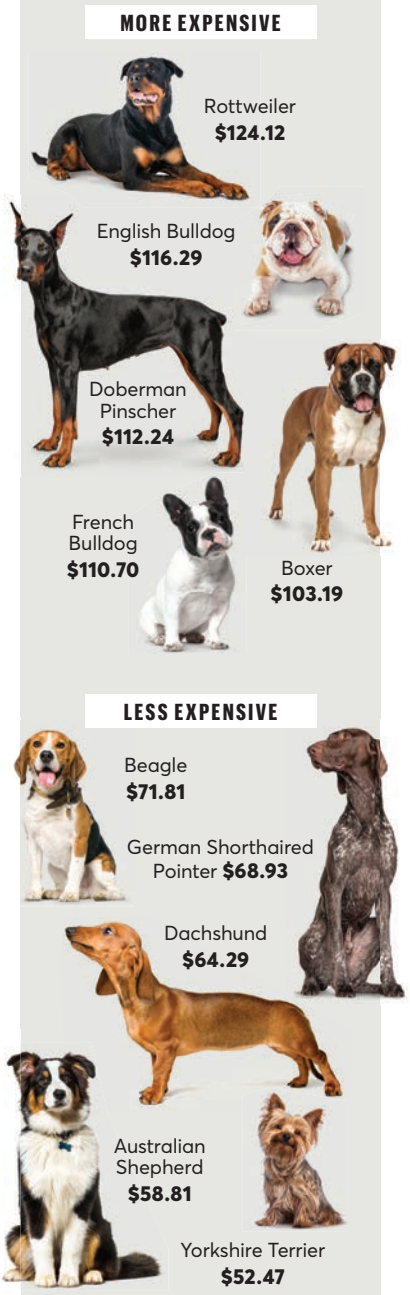
7 **Most plans let you choose your vet.** But some practices charge higher prices than others, so it's important to ask for a price list and be mindful of your coverage limits. You will be reimbursed according to your policy's terms no matter which vet you go to. Banfield Pet Hospital's wellness plans coverage is a notable exception to the any-vet rule. Its policyholders must select a provider from Banfield's network of 3,600-plus veterinarians.

Will Pet Insurance Save You Money?

According to CR's analysis of respondents' claims experiences, getting pet insurance doesn't guarantee you'll save money. The typical survey respondent paid, on average, $47 a

THE COST TO INSURE THESE BREEDS

Premiums are based on your location and your pet's age, sex, and breed. Some breeds are prone to certain health issues, which translates into higher premiums. Rottweilers, for example, are predisposed to hip, elbow, and eye disorders. Here is what other popular dog breeds cost to insure.



AVERAGE MONTHLY COST*

*Based on a 2021 analysis by AdvisorSmith, an insurance research firm, using estimates from a variety of insurers of 15 of the most popular dog breeds.

PHOTO, PREVIOUS SPREAD: TY FOSTER. PHOTOS, THIS SPREAD: GETTY IMAGES (11)

Ratings › **Pet Protection** Here's what members told us about their experiences using their pet insurance and how satisfied they were with coverage, claims, cost, and more.

Provider	Reader Survey Results														
	Overall Satisfaction Score	Price paid	Coverage options	Reimbursement options	Coverage eligibility	Max limits choice	Vet choices	Choice of deductible	Discounts	Additional features	Claims process	Claims portal	Reimbursement amount	Claims service	Timely payment
PET INSURANCE															
Pets Best	55	●	▲	●	●	●	▲	●	▼	●	▲	▲▲	●	▲	●
Embrace	52	●	●	●	●	●	▲▲	●	●	–	▲	▲	▲	▲	▲
Trupanion	52	●	●	▲	●	●	▲	●	▼▼	●	▲	▲▲	▲	▲▲	▲▲
Healthy Paws	51	▼	●	●	●	●	▲▲	●	▼▼	▼	▲	▲▲	▲	●	▲
ASPCA	43	▼	●	●	▼	▼	▲	●	–	–	–	–	–	–	–
Nationwide Pet Insurance	42	▼	●	●	▼	▼	▲	▼	▼	●	▲	▲	●	▲	▲
Fetch	38	▼▼	●	▼	▼	●	▲	▼	–	–	●	●	▼	▼	●
Banfield	35	▼	▼	▼	●	▼▼	▼▼	–	▼▼	●	▲	–	–	▲	–

HOW WE TEST: Ratings are based on Consumer Reports' 2022 Fall Survey of 2,061 CR members with pet insurance. Overall Satisfaction Score of insurers is derived from CR members' ratings of price paid for policy, coverage options, reimbursement options, coverage eligibility, choice of maximum annual limits, our CR Consumer Experience Score, and choice of veterinarians.

month for coverage ($564 a year). The average respondent submitted claims for about $786 for vet services yearly, but according to our estimates likely received reimbursements of between $500 and $600. Because they also pay a deductible and copays, in the end most respondents pretty much broke even.

Those who got "wellness" care coverage (which includes a pet's annual visit with vaccines, etc.) could save a little if they were also buying major medical coverage. According to the ASPCA, the annual cost of routine wellness care for a dog is $225, while the riders for this coverage raise the premium you're already paying by $120 to $300 annually.

The Peace of Mind Factor

Though pet insurance won't necessarily save you much if your pet has only routine illnesses or injuries—an ear infection, a bite wound—it could save you a bundle in the case of catastrophic accidents or illnesses. "It is sad to see that some pet owners have to put their pets down because they don't have the means to cover the bills," said one survey respondent who had insured his Chihuahua for a decade before a cancer scare required scans, X-rays, and oncologist consultations. The bills came to nearly $7,000, which insurance covered. He said having pet insurance gave him peace of mind because he didn't have to think about the cost.

But given the potential cost of pet insurance, there is another option. Some experts advise owners to "self-insure" their pets, by putting a similar amount as a monthly premium in a dedicated high-interest-bearing savings account. Use this fund only for big-ticket expenses: surgery, chemo, pricey drugs. If you save $50 a month from the time your pet is 2 and don't need to tap it until they're, say, 12, you'll have as much as $7,400 in the account, assuming 4 percent annual interest.

Making the Insurance Decision

Acquiring pet insurance may require you to take stock of both your emotional and financial reserves. For some, the decision will come down to simple math, while others may conclude that buying insurance is the right choice for the peace of mind it provides. For now, I'm pursuing a hybrid route. When Phoebe was injured, we opted for a $25 consult from a vet telehealth service that offered five days of unlimited vet access via text and video conference. With the consult, medicine, and supplies, we spent $133 to get Phoebe on the mend. Bond Vet and Pawp are two pet telehealth options.

Another way to save on vet care is to use a veterinary teaching hospital, which may be able to offer discounts on care. The American Association of Veterinary Medical Colleges suggests contacting its member institutions to learn about specific services.

How to Choose a Good Olive Oil

Confused by all the options? Here are some tasty extra virgin oils for dipping or drizzling, and good choices for cooking, too.

BY JENNIFER COOK

EVER STAND IN FRONT of a shelf of olive oils in a grocery store and think, "why does this have to be so complicated?" So many brands and so many types—extra virgin, light, and just plain olive oil. Which is best for cooking, for layering on a slice of sourdough, for drizzling on tomatoes and mozzarella? And are they all equally good for you?

Then there's the price. Because of the recent hot, dry weather in Mediterranean countries, where most olive oil is made, prices have jumped.

But can you really taste the difference between a $10 bottle of olive oil and a $30 one? We tested 26 extra virgin olive oils, the most common type, to find out.

"Extra virgin oil should taste fresh, with olive fruit flavor, plus some bitterness and pungency—which is a peppery, warm, tingling sensation at the back of your throat," says Amy Keating, RD, who oversaw CR's tests. The oils shouldn't have off-notes, such as being musty (moldy) or stale (meaning they've been oxidized), or taste like they were made from old olives that had fermented or gone bad.

We found 11 oils that met CR's expectations of what an extra virgin olive oil should taste like. Some were from companies you may not know, such as Wonder Valley or Brightland. Several were pricey (up to $37 for a 12.7 fluid ounce bottle, or $2.91 an ounce), but a few were budget-friendly.

The other oils—including those from Bertolli, Colavita, Filippo Berio, Goya, and Trader Joe's—varied in quality, ranging from some we think taste pretty good to others that did not impress our experts.

Our Top-Ranked Olive Oils

1. Lucini Italia Premium Select Extra Virgin Olive Oil **2.** Wonder Valley Olive Oil **3.** Specially Selected (Aldi) Sicilian Extra Virgin Olive Oil **4.** Brightland Awake Extra Virgin Olive Oil **5.** California Olive Ranch 100% California Medium Extra Virgin Olive Oil **6.** Graza Sizzle Extra Virgin Olive Oil **7.** Cobram Estate 100% California Select Extra Virgin Olive Oil

What's Extra Virgin Olive Oil Anyway?

There are different grades of olive oil based on its aroma, flavor, and chemical makeup.

Extra virgin olive oil (EVOO), the highest grade, must pass special chemical tests. These oils should have optimum (meaning low) levels of acidity and ultraviolet-light absorption (high levels suggest poor processing or deterioration), among other things.

Extra virgin oils should taste great, but they can taste (and smell) different from each other. Some can be fruity and nutty, others grassy and herbal, or pleasantly bitter and pungent. Many are a combination of those flavors.

The compounds that give EVOO its bitterness and pungency, called polyphenols, also contribute to making the oil healthy. Those antioxidants fight cell damage that can cause heart disease and other illnesses. EVOOs are also rich in heart-healthy monounsaturated fats.

Turning olives into extra virgin oil requires careful processing from the start. "The olives are picked when they're ripe, but not too ripe," says Selina Wang, PhD, an olive oil expert in the department of food science and technology at the University of California, Davis. They're washed and crushed, and the paste is spun in a centrifuge to extract the oil. The process, sometimes called cold pressed, preserves the antioxidants. No heat or chemicals are permitted, so these oils are considered unrefined.

The next grade, virgin, is also made without heat or chemicals. It has some chemical or flavor flaws (though it can still taste good), and may not be as rich in antioxidants. It's also not easy to find: Virgin oils are sold in Europe but rarely in the U.S.

PHOTOGRAPH BY BEN GOLDSTEIN

Products labeled just "olive oil" are a blend of heat-refined and extra virgin or virgin oils. They're milder than EVOO or virgin, and are lower in antioxidants. "Light" olive oil is mostly refined oil and has an even milder flavor.

Is It Really Extra Virgin?

In the U.S., making sure that you're actually getting an EVOO is more complicated than elsewhere.

Olive oil-producing countries in Europe, the Middle East, and South America follow standards set by the International Olive Council. In the U.S., the Department of Agriculture does have standards based on the IOC's, as does the North American Olive Oil Association—but they're voluntary. And olive oils imported to the U.S. aren't bound by IOC rules.

One exception: California has mandatory standards stricter than the IOC's for companies that make 5,000 gallons or more a year from olives grown in the state.

Oils That Taste Great

For our tests, two olive oil experts evaluated three samples of each oil for taste using standard industry methods. The tasting was blind, with each oil served in special blue glasses so that the color—which is not an indication of quality—didn't influence the evaluation. We also sent samples to a larger trained olive oil tasting panel as a cross-check, and to a lab for chemical testing.

CR gave high marks to 11 oils, recommending seven. Three are CR Smart Buys, with one—Specially Selected (Aldi) Sicilian Extra Virgin Olive Oil—costing just 50 cents an ounce. Results for eight others were less consistent, though "they're still okay for sautéing or roasting," Keating says. Seven had off-flavors that even cooking may not hide.

CR contacted the seven companies with the lowest-scoring oils in our tests for their response to our findings. The maker of Paesanol Unfiltered Extra Virgin Olive Oil said lab tests are a better indicator of quality than taste. The maker of Terra Delyssa Smooth Extra Virgin Olive Oil said it disagreed with CR's findings and that two panels it used found no issues. And the maker of the Botticelli Extra Virgin Olive Oil said off-tastes could have come from the product sitting too long on a store shelf, or simply be "the ripe taste typical" of a Spanish oil. Other companies did not comment.

Keeping Olive Oil Fresh

Light, heat, and oxygen can affect the flavor and deplete antioxidants in olive oils, so follow these tips.

Choose a dark bottle. Cans or amber, black, or green glass bottles are best for keeping light out.

Buy only as much as you'll use in a few months. Once EVOO is opened, it begins to oxidize.

Store it away from heat and light. Don't keep olive oil on the counter or in a cabinet near the dishwasher or stove.

Always cap the bottle tightly. This keeps air from getting inside the bottle.

HOW TO READ AN OLIVE OIL LABEL

Cold Pressed

This means an oil was extracted from olives without heat or solvents—but that's true of all extra virgin olive oil. And while the term "cold pressed" is common, few oils today are made by pressing; instead, crushed olives are put in a centrifuge to extract the oil.

Harvest Date

The date when the olives were picked and crushed is the best indicator of how fresh an olive oil is, says olive oil expert Selina Wang. "You'll always want to try to buy the most recent harvest." If you're buying an olive oil in January, look for a date from the previous fall for oil produced in the northern hemisphere, or the previous spring for one produced in the southern hemisphere.

Best By Date

"Best by" or "best before" dates typically are two years from bottling, Wang says, suggesting that the company expects the olive oil will maintain its extra virgin grade until that date if the bottle isn't opened. But a good move is to choose one with a best-by date that's furthest from the date of purchase.

The North American Olive Oil Association Seal

This organization tests olive oils made by companies that pay to use its seal, choosing bottles at random from grocery store shelves. But of the 11 oils in our tests with the group's seal, we found products that ranged from some we thought tasted very good to some that tasted fermented or stale. Joseph R. Profaci, executive director of the NAOOA, says it focuses on chemical testing. "Our seal gives consumers confidence that an olive oil is the real deal, then lets them decide for themselves if an olive oil's taste is something that they like and will complement their cooking."

California Olive Oil Council Seal

Companies that make oil from olives grown in California can have this organization test their products. The seal can be used only for those oils that meet the state's strict standards for extra virgin olive oil. All four of the California olive oils in our tests, even those without the label, were among our top-ranked oils.

PROP STYLING (PREVIOUS SPREAD): MIAKO KATOH. PHOTOS: SCOTT MEADOWS/CONSUMER REPORTS

Best (and Worst) Olive Oils

The Right Oils for Dipping, Drizzling, and Dressings

These 11 oils met CR's expectations for a high-quality olive oil. The seven recommended ones stood out for their fresh, complex flavors. The other four were good but slightly less fresh. You can use any of them for cooking, but their flavor makes them special, and thus better as a condiment. The oils are in rank order, from the top left to the bottom right.

Lucini Italia Premium Select Extra Virgin Olive Oil

4/5 OVERALL QUALITY
$27 for 25.4 fl. oz.
$1.06 PER OZ.

Robust and grassy with herbal notes. Would pair well with spicy food, beef, lamb, and bold-flavored vegetables like arugula or broccoli.

Wonder Valley Olive Oil [2]

4/5 OVERALL QUALITY
$36 for 12.7 fl. oz.
$2.83 PER OZ.

A fruity flavor balanced with pepperiness and bitterness. Its strong taste would make it good for drizzling on foods and in salad dressings.

Specially Selected *(Aldi)* Sicilian Extra Virgin Olive Oil [1]

4/5 OVERALL QUALITY
$8.50 for 16.9 fl. oz.
50¢ PER OZ.

A mild oil with fruity, floral, and nutty notes. Try this with pasta, mild cheeses, and delicate fish. Its low price could make it a good option for cooking, too.

Brightland Awake Extra Virgin Olive Oil [2]

4/5 OVERALL QUALITY
$37 for 12.7 fl. oz.
$2.91 PER OZ.

Very well balanced with grassy and herbal flavors and some pleasant bitterness. Its big flavor would complement bold and spicy foods.

California Olive Ranch 100% California Medium Extra Virgin Olive Oil [2]

4/5 OVERALL QUALITY
$16.50 for 25.4 fl. oz.
65¢ PER OZ.

Both fruity and grassy, with nutty, herbal, and minty flavors. Would work well with bread, poultry, and many other foods.

Graza Sizzle Extra Virgin Olive Oil

4/5 OVERALL QUALITY
$15 for 25.3 fl. oz.
59¢ PER OZ.

Pungent and bitter, with big, grassy flavor and some fruitiness. Would work well in dressings and on spicy and bold-flavored foods.

Cobram Estate 100% California Select Extra Virgin Olive Oil [2]

4/5 OVERALL QUALITY
$24 for 25.4 fl. oz.
94¢ PER OZ.

Nutty, with both fruit and herbal flavors. Would be good with pasta, eggs, mild cheeses, and delicate fish.

Kosterina Original Extra Virgin Olive Oil

4/5 OVERALL QUALITY
$30 for 16.9 fl. oz.
$1.78 PER OZ.

Fruity, herbal, and grassy flavors come through, with some pleasant bitterness and pungent pepperiness.

Iliada Organic Extra Virgin Olive Oil [1]

4/5 OVERALL QUALITY
$10 for 16.9 fl. oz.
59¢ PER OZ.

Grassy with a slight bitterness, and some ripe fruit, nutty, and herbal notes.

Partanna Robust Extra Virgin Olive Oil

4/5 OVERALL QUALITY
$15 for 25.5 fl. oz.
59¢ PER OZ.

Grassy, herbal flavors with some fruit.

Frankies 457 Organic Extra Virgin Olive Oil

4/5 OVERALL QUALITY
$30 for 33.8 fl. oz.
89¢ PER OZ.

Hints of fruit with slight buttery, nutty, and herbal notes.

WORSE — BETTER | CR RECOMMENDED | CR SMART BUY

[1] Has the North American Olive Oil Association Seal. [2] Made from olives grown in California.

Fine for Cooking With

These oils, listed in rank order from top left to bottom right, had flavor problems, typically tasting slightly fermented, stale, or both. But the flaws were small, so you might not notice them, and all are good enough for cooking.

Goya Extra Virgin Olive Oil [1]

3/5 OVERALL QUALITY

$11 for 17 fl. oz.
65¢ PER OZ.

This oil was good, with fruity, nutty, and buttery notes, with minimal off-flavors.

Filippo Berio Extra Virgin Olive Oil [1]

3/5 OVERALL QUALITY

$11.50 for 25.3 fl. oz.
45¢ PER OZ.

This oil was fruity with some complexity.

Kirkland Signature *(Costco)* Organic Extra Virgin Olive Oil

3/5 OVERALL QUALITY

$19 for 67.6 fl. oz.
28¢ PER OZ.

This inexpensive oil had mostly grassy and herbal flavors with a little fruitiness.

La Tourangelle Organic Bright and Peppery Extra Virgin Olive Oil [1]

3/5 OVERALL QUALITY

$22 for 25.4 fl. oz.
87¢ PER OZ.

This mild oil had some complexity, with fruity and nutty flavors.

Colavita Premium Selection Extra Virgin Olive Oil [1]

3/5 OVERALL QUALITY

$20.50 for 25.5 fl. oz.
80¢ PER OZ.

This oil was pungent and fruity, with a nice herbal flavor.

365 Whole Foods Market Mediterranean Blend Extra Virgin Olive Oil [1]

3/5 OVERALL QUALITY

$9.50 for 33.8 fl. oz.
28¢ PER OZ.

A bitter and pungent oil with some fruit.

Pompeian Smooth Extra Virgin Olive Oil [1]

3/5 OVERALL QUALITY

$12 for 24 fl. oz.
50¢ PER OZ.

A fruity oil with some nutty and buttery notes.

Bertolli Rich Taste Extra Virgin Olive Oil

3/5 OVERALL QUALITY

$12.50 for 25.36 fl. oz.
49¢ PER OZ.

This had some bitterness and pungency, plus fruitiness.

Not So Hot

There are better choices than these, which all had more serious flaws, including tasting stale or fermented. Listed in rank order from top left to bottom right.

Paesanol Unfiltered Extra Virgin Olive Oil

2/5 OVERALL QUALITY

$23 for 25 fl. oz.
92¢ PER OZ.

This oil was slightly fruity but not very complex or balanced. One sample was a little musty.

Botticelli Extra Virgin Olive Oil [1]

2/5 OVERALL QUALITY

$13.50 for 25.3 fl. oz.
53¢ PER OZ.

This had fairly low fruit flavor with some bitterness.

Zoe Organic Extra Virgin Olive Oil [1]

2/5 OVERALL QUALITY

$16 for 25.5 fl. oz.
63¢ PER OZ.

One sample was decent, with some fruit flavor and complexity, but the other samples were flawed.

Trader Giotto's *(Trader Joe's)* Extra Virgin Olive Oil

2/5 OVERALL QUALITY

$9 for 33.8 fl. oz.
27¢ PER OZ.

This oil had hardly any fruit flavor.

Great Value *(Walmart)* Extra Virgin Olive Oil

2/5 OVERALL QUALITY

$7.50 for 25.5 fl. oz.
29¢ PER OZ.

This had very little fruit flavor.

Terra Delyssa Smooth Extra Virgin Olive Oil [1]

2/5 OVERALL QUALITY

$14 for 34 fl. oz.
41¢ PER OZ.

Very little fruit, pungency, or bitterness.

Good & Gather *(Target)* Extra Virgin Olive Oil

2/5 OVERALL QUALITY

$10.50 for 25.5 fl. oz.
41¢ PER OZ.

This had hardly any fruit flavor.

HOW WE TEST: We chemically tested three samples of each oil and had two experts and a trained panel evaluate flavor. A good oil should be fresh and fruity with some bitterness and pungency. It should not taste fermented (fusty), from poorly stored olives, or stale, which indicates oxidation. Our comparative analysis used USDA criteria as a model, but our tests are not assessments of whether an oil complies with any standard.

[1] Has the North American Olive Oil Association Seal. [2] Made from olives grown in California.

WORSE — BETTER

CR RECOMMENDED

PHOTOS: SCOTT MEADOWS/CONSUMER REPORTS

ROAD REPORT

NEWS & EXPERT ADVICE TO KEEP YOU AHEAD OF THE CURVE™

FIRST DRIVE

Toyota Grand Highlander

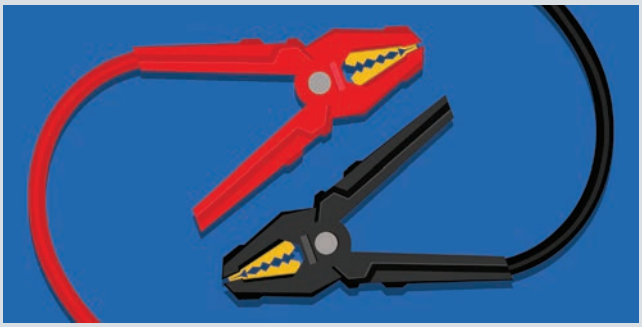
A three-row SUV, the Grand Highlander is a new take on the traditional Highlander. It has an extra 6 inches of length over its sibling for a roomier third row and more cargo space. Its Max hybrid version gets a decent 27 mpg combined.

CR'S TAKE: Highly functional but less than "grand" because the XLE's cabin is short on the soft surfaces buyers expect at this price. The Max version shines brightest for its mighty powertrain, but it comes with a premium price.

BASE PRICE RANGE $43,070-$58,125
DESTINATION CHARGE $1,395
PRICE AS DRIVEN $59,520

TIP FROM THE TEST TRACK

Keep a Portable Jump Starter Onboard for Emergencies



Car **batteries can fail** at the most inopportune moments. That's why it's a good idea to keep a jump starter—essentially a paperback-sized backup battery—in your car. **Jump starters** designed to tolerate temperatures as high as 140° F can be bought for under $100, such as the Avapow Jump Starter A07 1500A and Nexpow G17 2000A. They **can also be used to charge phones,** tablets, and other devices. They usually hold a charge for months, but it's wise to periodically check the charge level.

THE VITAL STATISTIC

2030

The year by which electric vehicle sales will exceed two-thirds of all new-car sales globally. Sales are expected to increase as EV batteries become cheaper to produce, making an EV purchase more affordable.

Source: Rocky Mountain Institute.

RECALL

Nissan

Over 153,000 Nissan sedans have been recalled to fix defective backup cameras, including certain 2019-2021 Altima and 2020-2021 Sentra models. The problem has to do with faulty wiring that might become damaged due to normal vibration and movement. If this happens, the backup camera on recalled cars could stop displaying an image or could display a distorted one, creating a safety risk.

WHAT TO DO: Nissan dealerships will inspect and either replace the wiring harness or reroute it as necessary, adding a protective tape at no charge. Call Nissan at 800-867-7669.

ASK OUR EXPERTS

What isn't usually covered by auto insurance?

Car insurance is designed to protect you from financial disaster, but you should never assume your policy covers everything that can be damaged or stolen.

Of course, repairs with costs that fall below the deductible will most likely have to be paid out-of-pocket, but bear in mind that not all authorized repairs include using original factory parts. Also, the contents of the car, whether jewelry or electronic devices, may not be covered by an auto policy. Comprehensive insurance covers many types of damage caused by "acts of nature," but it's possible that fire, flood, or tree damage won't be covered. Review your policy annually to know for certain.

PHOTO: JOHN POWERS/CONSUMER REPORTS

ILLUSTRATION BY KIERSTEN ESSENPREIS

The Most (and Least) Reliable Cars

Our annual survey reveals the new cars you can count on from Toyota, Lexus, Tesla, and others, and the brands that aren't so reliable.

by Jonathan Linkov

BUYING AND MAINTAINING a car is the second-biggest expense for American households, eclipsed only by the cost of housing. Today's stubbornly high auto prices and interest rates mean that it's a more high-stakes financial decision than ever.

"Buying a reliable car is a good way to avoid the inconvenience of repairs while the car is under warranty and a smart way to save money on the cost of vehicle ownership over time," says Jake Fisher, senior director of auto testing at Consumer Reports. "That's why consumers consistently tell us that reliability is one of the most important factors when buying a car."

To help you identify the most reliable models, we calculate predicted reliability ratings for almost every new auto on the market using data from our annual reliability survey. The survey covers 20 potential problem areas (including the engine, transmission, electric motors, leaks, and infotainment systems) and includes responses on more than 330,000 vehicles.

Whether you're looking for a sedan, an SUV, or a truck with a gas, hybrid, or fully electric engine, the charts on the following pages will lead you to the most reliable models and brands. Keep reading to find out about some of this year's key findings.

SUBCOMPACT SUV

99 RELIABILITY SCORE

✓ Subaru Crosstrek

LUXURY COMPACT SUV

83 RELIABILITY SCORE

✓ Lexus UX

MIDSIZED 3-ROW SUV

75 RELIABILITY SCORE

✓ Toyota Highlander Hybrid

MOST RELIABLE MODELS BY CATEGORY

COMPACT CAR

84 RELIABILITY SCORE

Toyota Prius

COMPACT SUV

84 RELIABILITY SCORE

Toyota RAV4 Prime

MIDSIZED 2-ROW SUV

87 RELIABILITY SCORE

Toyota 4Runner

LUXURY MIDSIZED SUV

82 RELIABILITY SCORE

BMW X5

PICKUP TRUCK

71 RELIABILITY SCORE

Ford Maverick

WORSE — BETTER | CR RECOMMENDED | CR GREEN CHOICE

Electric Vehicles Make Gains

After several years of spotty reliability scores, Tesla now has two models that CR recommends. The Model Y SUV made the list for the first time this year, and the Model 3 continues to be recommended. Overall, CR members reported few if any problems with their Teslas' electric motors, batteries, or charging. Build quality, however, remains a persistent problem, with members reporting issues with paint and trim, body hardware, noises and leaks, and electrical accessories (such as headlights and windshield wipers) for several model years.

Last year we found the Ford Mustang Mach-E EV, which premiered in 2021, to have battery and charging problems. "Ford has improved its EV battery and charging system since then, so we can recommend the 2024 Mach-E," says Steven Elek, who oversees auto data analytics at CR. "This validates our advice to wait a few years before buying any new or newly redesigned vehicle to give the automaker time to work out problems," Elek says.

The news for some other EVs is not as rosy: CR members report that the Hyundai Ioniq 5 and Volkswagen ID.4 both suffer from significant problems with their charging systems and batteries. Rivian gets most of the electric components right, but both its truck and its SUV have build quality and drive system issues.

Sedans Continue to Shine

Certain vehicle types have consistently proved to be more reliable than others. Cars, including sedans, hatchbacks, and wagons, remain the most reliable vehicle type, with an average reliability rating of 57 (on a scale of 0 to 100), followed by SUVs (50) and minivans (45). "Sedans have fallen out of favor with consumers, but as a class they are very reliable," Fisher says. "They often have less of the latest technology and features that can cause problems before the bugs are worked out."

Pickup trucks have landed at the bottom of our reliability rankings for seven of the past eight years, and they have an average rating of 41 this year. The least reliable category of all vehicle types is electric pickups, at 30. The Rivian R1T and Ford F-150 Lightning EV pickups are among the least reliable of any new models in our survey.

Some pickups buck this trend, such as the small Ford Maverick and

LEAST RELIABLE MODELS BY CATEGORY

SUBCOMPACT SUV

18 RELIABILITY SCORE

Volkswagen Taos

TROUBLE SPOTS: Brakes, electrical accessories, transmission, engine, electric system, in-car electronics, noises and leaks.

COMPACT CAR

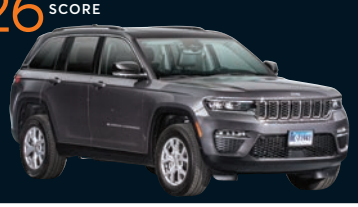
25 RELIABILITY SCORE

Volkswagen Jetta

TROUBLE SPOTS: Brakes, electrical accessories, climate system, in-car electronics.

MIDSIZED 2-ROW SUV

26 RELIABILITY SCORE



Jeep Grand Cherokee

TROUBLE SPOTS: Suspension, electrical accessories, drive system, in-car electronics, body hardware, noises and leaks.

LUXURY MIDSIZED SUV

35 RELIABILITY SCORE

Genesis GV80

TROUBLE SPOTS: Engine, brakes, suspension, electrical accessories, body hardware, climate system, in-car electronics.

Maverick Hybrid, the Hyundai Santa Cruz, the midsized Honda Ridgeline, and the full-sized Ram 1500, all of which are recommended.

Hybrids Stand Out

This year's survey shows that hybrids are becoming more reliable, but plug-in hybrids (PHEVs) are less so. "On average, hybrids are 26 percent more reliable than vehicles with only an internal combustion engine," Fisher says. Part of the reason, he says, is that many hybrids are based on conventional models that are already highly reliable. For instance, the conventional-engine Toyota Camry and Highlander SUV are among the most reliable of all vehicles in our survey, and their hybrid versions also land near the top of the list. The Ford F-150 Hybrid is an exception: It scores lower than the also unreliable conventional F-150, and is dogged by transmission problems and hybrid system issues.

Several plug-in hybrid electric vehicles (PHEVs) are less reliable than their conventional counterparts, such as the below-average Audi Q5 and Chrysler Pacifica PHEVs. "PHEVs combine conventional engines with an electric drive, and have the potential to provide fuel cost savings without the range anxiety that comes with an EV," Fisher says. "But they have both conventional and EV technology, so there's more that can go wrong with them." PHEV standouts include the Toyota RAV4 Prime and Kia Sportage, which score well above average; the BMW X5, Hyundai Tucson, and Ford Escape PHEVs earn average reliability scores.

COMPACT SUV

32 RELIABILITY SCORE

Ford Bronco Sport

TROUBLE SPOTS: Brakes, fuel system, climate system.

LUXURY COMPACT SUV

21 RELIABILITY SCORE

Volvo XC60 Plug-in Hybrid

TROUBLE SPOTS: EV battery, EV charging, electrical accessories, climate system, in-car electronics.

MIDSIZED 3-ROW/LARGE SUV

23 RELIABILITY SCORE

Jeep Grand Cherokee L

TROUBLE SPOTS: Suspension, electrical accessories, drive system, in-car electronics, body hardware, noises and leaks.

PICKUP TRUCK

19 RELIABILITY SCORE

Ford F-150 Hybrid

TROUBLE SPOTS: Transmission, electric system, electric/hybrid battery, electrical accessories, drive system, in-car electronics.

WORSE — BETTER

How the Brands Stack Up

CHOOSING A MODEL from one of the top 10 brands in the chart can help narrow your choices, but be sure to research the reliability of any specific model before buying.

	BRAND	RELIABILITY SCORE
1	LEXUS	79
2	TOYOTA	76
3	MINI	71
4	ACURA	70
5	HONDA	70
6	SUBARU	69
7	MAZDA	67
8	PORSCHE	66
9	BMW	64
10	KIA	61
11	HYUNDAI	56
12	BUICK	55
13	INFINITI	53
14	TESLA	48
15	RAM	46
16	CADILLAC	45
17	NISSAN	45
18	GENESIS	44
19	AUDI	43
20	CHEVROLET	43
21	DODGE	42
22	FORD	40
23	LINCOLN	38
24	GMC	36
25	VOLVO	28
26	JEEP	26
27	VOLKSWAGEN	26
28	RIVIAN	24
29	MERCEDES-BENZ	23
30	CHRYSLER	18

This year we calculated brand-level score by first examining the weighted overall problem rate for all models within a brand for each model year. Then the brand reliability score was calculated by averaging results from 2021 to 2023, and some early 2024 data for each brand, where there was sufficient sample size. Because this is a change from prior years, we are not identifying whether a brand has moved up or down in relation to last year's ranking.

Our Reliability Predictions

EVERY YEAR CR asks members about problems they've had with their vehicles in up to 20 areas over the previous 12 months. We use their responses to calculate reliability ratings for major mainstream models. We statistically adjust for mileage as well as other factors. Our predictions for 2024 models are based on the overall reliability of each for the past three years and, in some cases, supplemented with

SUBCOMPACT SUVs

Subaru Crosstrek	99
Honda HR-V	85
Toyota Corolla Cross	71
Mazda CX-30	66
Kia Seltos	51
Chevrolet Trailblazer	50
Jeep Renegade	33
Volkswagen Taos	18

COMPACT SUVs

Toyota RAV4 Prime	84
Kia Sportage Plug-in Hybrid	83
Subaru Forester	82
Toyota RAV4	80
Honda CR-V	78
Hyundai Tucson	69
Mazda CX-50	69
Toyota RAV4 Hybrid	66
Mazda CX-5	65
Kia Sportage	60
Chevrolet Equinox	56
GMC Terrain	56
Kia Sportage Hybrid	56
Honda CR-V Hybrid	54
Hyundai Tucson Hybrid	53
Hyundai Tucson Plug-in Hybrid	48
Jeep Compass	45
Nissan Rogue	44
Ford Escape Plug-in Hybrid	43
Ford Escape Hybrid	43
Ford Escape	38
Volkswagen Tiguan	34
Ford Bronco Sport	32

MIDSIZED 2-ROW SUVs

Toyota 4Runner	87
Toyota Venza	72
Ford Edge	68
Subaru Outback	50
Nissan Murano	50
Honda Passport	48
Ford Bronco	37
Chevrolet Blazer	33
Volkswagen Atlas Cross Sport	28
Jeep Wrangler	27
Jeep Grand Cherokee	26

MIDSIZED 3-ROW/ LARGE SUVs

Toyota Highlander Hybrid	75
Hyundai Palisade	73
Toyota Highlander	69
Kia Sorento Hybrid	54
Kia Telluride	54
Honda Pilot	50
Dodge Durango	49
Subaru Ascent	49
Kia Sorento	47
Ford Expedition	43
Ford Explorer	35
Nissan Pathfinder	32
Volkswagen Atlas	32
GMC Yukon	30
GMC Yukon XL	30
Chevrolet Tahoe	29
Chevrolet Suburban	27
Jeep Grand Cherokee L	23

LUXURY COMPACT SUVs

Lexus UX	83
Acura RDX	80
Lexus NX Hybrid	73
BMW X3	73
Porsche Macan	63
Mini Cooper Countryman	63
BMW X1	55
Lexus NX	49
Infiniti QX50	49
Buick Encore GX	47
Buick Envision	47
Volvo XC40	46
Audi Q3	46
Lincoln Corsair	45
Cadillac XT4	42
Audi Q5	42
Audi Q5 Plug-in Hybrid	38
Genesis GV70	33
Volvo XC60	33
Mercedes-Benz GLA	24
Mercedes-Benz GLB	23
Volvo XC60 Plug-in Hybrid	21

LUXURY MIDSIZED SUVs

BMW X5	82
Lexus RX Hybrid	69
Lexus RX	68
Porsche Cayenne	67
Cadillac XT5	59
BMW X5 Plug-in Hybrid	53
Audi Q8	44
Mercedes-Benz GLE	36
Genesis GV80	35

LUXURY MIDSIZED 3-ROW/LARGE SUVs

Buick Enclave	55
Acura MDX	51
Audi Q7	49
Cadillac XT6	48
BMW X7	47
Infiniti QX60	42
Cadillac Escalade	41
Volvo XC90	39
Lincoln Aviator	35

ELECTRIC SUVs

Nissan Ariya	62
BMW iX	59
Kia EV6	48
Audi Q4 E-Tron	48
Subaru Solterra	47
Toyota bZ4X	47
Genesis GV60	46
Ford Mustang Mach-E	45
Audi Q8 E-Tron	41
Tesla Model Y	41
Hyundai Ioniq 5	33
Volkswagen ID.4	29
Tesla Model X	27
Rivian R1S	23

ELECTRIC CARS

Hyundai Ioniq 6	70
BMW i4	60
Kia Niro EV	51
Tesla Model 3	47
Nissan Leaf	46
Lucid Air	31
Tesla Model S	30
Mercedes-Benz EQS	20

ELECTRIC PICKUPS

Ford F-150 Lightning	39
Rivian R1T	22

COMPACT CARS

Toyota Prius	84
Toyota Corolla Hatchback	79
Toyota Corolla	77

the brand reliability score. Predictions for some new or redesigned models, or models with insufficient sample size, are based on brand history and other factors, and are not shown. Only one or two years of data are used if the model was new or redesigned in 2023 or 2022. Scores are on a scale of 0 to 100. A score of 41 to 60 is considered average. For more info, read our Reliability FAQ at **CR.org/reliability**.

Kia Niro Plug-in Hybrid	76
Mazda3	72
Kia Forte	67
Toyota Corolla Hybrid	67
Kia Niro	65
Toyota Prius Prime	62
Hyundai Elantra	61
Hyundai Venue	60
Honda Civic	60
Kia Soul	57
Hyundai Elantra Hybrid	54
Nissan Kicks	54
Nissan Sentra	42
Volkswagen Jetta	25

MIDSIZED/LARGE CARS

Toyota Camry Hybrid	87
Toyota Camry	86
Honda Accord Hybrid	66
Kia K5	62
Honda Accord	58
Toyota Crown	53
Nissan Altima	51
Hyundai Sonata	48
Subaru Legacy	47

LUXURY COMPACT CARS

Acura TLX	70
Volvo S60/V60	60
BMW 3 Series	59
Audi A3	55
Infiniti Q50	54
Acura Integra	47
Genesis G70	45
Cadillac CT5	45
Audi A4/Allroad	42
Mercedes-Benz C-Class	19

LUXURY MIDSIZED/ LARGE CARS

Lexus ES	75
Lexus ES Hybrid	73
Audi A6	46
Genesis G80	44

SPORTS/SPORTY CARS

Subaru WRX	78
Toyota GR86	76
Subaru BRZ	76
Mazda MX-5 Miata	73
Mini Cooper	70
BMW 4 Series	63
Audi A5	62
BMW 2 Series	61
Chevrolet Corvette	43
Volkswagen GTI	29

MINIVANS

Kia Carnival	68
Toyota Sienna	52
Honda Odyssey	51
Chrysler Pacifica	43
Chrysler Pacifica Hybrid	14

SMALL PICKUPS

Ford Maverick	71
Ford Maverick Hybrid	60
Hyundai Santa Cruz	56

MIDSIZED PICKUPS

Honda Ridgeline	57
Jeep Gladiator	40
Chevrolet Colorado	32
GMC Canyon	32
Nissan Frontier	23

FULL-SIZED PICKUPS

Chevrolet Silverado 2500HD	51
GMC Sierra 2500HD	51
Ram 1500	49
GMC Sierra 3500HD	44
Ram 2500	43
Ram 3500	42
Chevrolet Silverado 3500HD	42
Ford F-150	35
Toyota Tundra	30
Chevrolet Silverado 1500	29
GMC Sierra 1500	29
Ford F-150 Hybrid	19

WORSE — BETTER

CR RECOMMENDED

Who's Up and Who's Down?

THE RELIABILITY of a specific model can move up or down the list from year to year. Automakers can see vehicle reliability worsen as they ramp up production, while midcycle changes can eliminate problems. These lists highlight the models that have newly gained or lost our recommendation. For more details and comments from manufacturers that lost recommendations, go to **CR.org/reliability.**

NEWLY RECOMMENDED

MODELS THAT HAVE IMPROVED TO AVERAGE OR BETTER

Audi Q4 E-Tron
Audi E-Tron/Q8 E-Tron
Cadillac CT4
Cadillac CT5
Cadillac XT6
Chrysler Pacifica
Ford Mustang Mach-E
Hyundai Elantra
Hyundai Santa Cruz
Infiniti QX60
Kia Sorento
Nissan Sentra
Porsche Taycan
Subaru WRX
Tesla Model Y

NO LONGER RECOMMENDED

MODELS THAT HAVE DECLINED TO BELOW AVERAGE

Chevrolet Blazer
Genesis GV70
Hyundai Ioniq 5
Volkswagen Atlas
Volkswagen Atlas Cross Sport
Volkswagen Jetta

Get More From Your Motor Oil

IF YOU'RE THE DILIGENT TYPE who checks your engine oil level at least once a month (as CR's experts recommend), there's a chance that at some point the dipstick will read "low" and you're going to need to top up the oil. But the array of oils you'll find lining the shelves today—regular conventional and more pricey synthetic, synthetic blend, and "extended life" and "high mileage" conventional oils—may leave you wondering which is the best for your car.

"In a pinch, most any motor oil will do an adequate job and keep your engine from exploding," says John Ibbotson, chief mechanic at Consumer Reports' Auto Test Center. "But depending on the model you own and the conditions you drive in, some oils will perform and protect your engine much better than others. In the long run, choosing the right oil—and changing it at the correct intervals—will save you money and keep the engine from wearing out prematurely."

Below, Ibbotson provides a primer on modern motor oil and offers advice on how to choose the optimal one for your car.

WHY YOUR CAR NEEDS OIL

Motor oil is an engine's lifeblood. It creates a lubricating film between moving metal parts to keep them cool and reduce friction. Without it, excessive heat created by the parts rubbing together would severely damage the engine, in the worst case paralyzing the vehicle as spinning chunks of the engine break through the oil pan. "Oil breaks down and loses its protective properties over time, which is why you need to change it, typically every 5,000 to 10,000 miles," Ibbotson says. "Engines wear as the miles pile on, and some may burn or leak oil after a while, so it's vital to check the level regularly and top it up between oil changes."

HOW TO DECODE OIL TYPES

The alphanumeric codes on a quart of oil—5W-30, 0W-20, etc.—denote its "weight," or viscosity. Thicker, higher-viscosity liquids flow more slowly, like syrup; lower-viscosity liquids flow faster, like water. The first number represents the oil's viscosity in cold weather (the "W" stands for "winter") and the second one represents its viscosity at higher operating temperatures. Heavier oil can make an engine more difficult to start on a cold day. The old rule about using higher-viscosity oil in the summer rarely applies today. "Newer cars typically use lower-viscosity oil because it fits in the tighter clearances used in modern engines," Ibbotson says.

CONVENTIONAL vs. SYNTHETIC

Conventional oil is pumped out of the ground and refined, while synthetic is designed in a lab and produced in a factory. Most new cars call for synthetic oil, although some still use conventional oil or synthetic blends (more likely the case with older cars). Any motor oil will do the job, but some types are better than others under certain conditions. "The big difference is that synthetic oil tends to last longer than conventional oil between changes—up to 10,000 miles or more," Ibbotson says. Synthetic oil costs about 30 percent more than conventional oil, but you'll only need to replace it half as often, offsetting its greater cost.

WHEN TO UPGRADE

"Normally, you should use the oil your owner's manual recommends," Ibbotson says. "There's no need to upgrade to synthetic unless your car falls under the 'severe usage' category." He says this includes taking short car trips that don't allow the engine to warm up completely (typically drives that last less than 15 minutes); not putting many miles on your car annually; using your car for towing; or living in a place with extreme temperatures. In these cases, Ibbotson thinks that synthetic oil is better and can even help to prevent premature engine wear. "It holds up better in extreme heat and cold."

ILLUSTRATION BY KIERSTEN ESSENPREIS

ROAD TEST

EXCLUSIVE RATINGS & REVIEWS
BASED ON TESTING AT CR'S
327-ACRE AUTO TEST CENTER

SMALL SUVs

Subaru Crosstrek

Subtle Updates to a Great Little SUV

87
OVERALL SCORE

ROAD-TEST SCORE 82

HIGHS Comfortable ride, strong fuel economy, short stopping distances, standard all-wheel drive, visibility

LOWS Standard engine feels underpowered and sounds strained

POWERTRAIN 152-hp, 2.0-liter 4-cylinder engine; continuously variable transmission; all-wheel drive

FUEL 29 mpg on regular

PRICE $24,995-$31,995 base price
+ $1,295 destination charge
Total MSRP as tested $29,685

AFTER AN EVOLUTIONARY redesign, the Crosstrek continues to shine, thanks to its excellent ride comfort, good fuel economy, standard all-wheel drive, and high enough ground clearance for mild off-roading. We wish the base engine didn't feel so feeble or get so loud, but the Crosstrek still outscores all other subcompact SUVs.

The way it abruptly takes off from a stop suggests it's packing some genuine power; in reality, that initial burst is the quickest the Crosstrek ever feels. (It needed 10.1 seconds from 0 to 60 mph.) At least it attained 29 mpg overall, the best among nonhybrid SUVs. An optional 2.5-liter engine has stronger oomph, and makes the driving experience more satisfying.

The Crosstrek handles well during regular driving, with quick steering and minimal body roll. Tenacious tire grip and a well-tuned ESC system helped it slice through our avoidance maneuver at an admirable 56.5 mph. But it is the Crosstrek's composed and absorbent ride that impresses most, with a suspension that soaks up bumps so well that occupants might barely notice typically jarring things like recessed manhole covers.

For the first time, the Crosstrek is available with a power driver's seat with adjustable lumbar. The rear seat is comfortable with good leg support, though headroom will be tight for taller folks.

Controls are largely user-friendly. Most climate tasks are on the touchscreen, rather than physical buttons, but they're always visible and don't require switching to a specific "climate" menu.

AEB with pedestrian detection and AEB highway are standard. BSW and RCTW are available on higher trims.

COMPACT HYBRIDS

Toyota Prius

Trades Practicality for Style

80
OVERALL SCORE

ROAD-TEST SCORE 76

HIGHS Fantastic fuel economy, quick acceleration for its class, hatchback versatility, optional AWD

LOWS Access and visibility hurt by sleeker styling, raucous engine noise when pushed, rear-seat comfort

POWERTRAIN 196-hp, 2.0-liter 4-cylinder hybrid engine; electronic CVT; all-wheel drive

FUEL 51 mpg on regular

PRICE $27,650-$36,065 base price
+ $1,095 destination charge
Total MSRP as tested $33,909

TOYOTA MADE the Prius hybrid sleeker and more engaging to drive, while keeping its superb fuel economy. But a less spacious interior, a firmer ride, and swoopy styling that compromises access and outward visibility knocked points off its road-test score.

Fuel economy is still the Prius' main event, and we measured 51 mpg overall–an impressive number considering our tested car's all-wheel drive. It hustled from 0 to 60 mph in 7.7 seconds, a dramatic 2-second improvement. Although the Prius can drive on electric power at low speeds, the gas engine kicks on with a raspy groan when extra acceleration is needed, which sours the driving experience.

We like the car's newfound nimbleness through turns. The ride has a noticeably firmer edge than before, due in part to our tested car's 19-inch tires, but we don't think that's a deal breaker.

The front seats have reasonably soft cushions and supportive side bolsters, but the driving position is odd: You sit very low, visibility is hampered by thick windshield pillars, and the instrument panel is far away. The rear seat is tighter than before. It's low to the floor, resulting in very little under-leg support. Even so, headroom is limited.

We were a bit irked by the small climate-control labels and unclear steering-wheel icons, and that the gear selector moves in a confusing path. Cargo room has also been downgraded: We could fit only two large suitcases behind the rear seat–with the last Prius we fit those plus two large duffel bags.

AEB with pedestrian detection, AEB highway, BSW, and RCTW come standard.

PHOTOS: JOHN POWERS/CONSUMER REPORTS

Safety Term Glossary: AEB automatic emergency braking; **BSW** blind spot warning; **LDW** lane departure warning; **LKA** lane keeping assistance; **RCTW** rear cross traffic warning.

LUXURY ELECTRIC SUVs

Mercedes-Benz EQE SUV

Comfortable EV With Mushy Brakes

55

OVERALL SCORE

ROAD-TEST SCORE 76

HIGHS Quick acceleration, short dry stopping distance, quiet cabin, comfortable front seats, high-quality interior

LOWS Distracting controls, squishy-feeling brakes

POWERTRAIN 288-hp, dual electric motors; 1-speed direct-drive; all-wheel drive

RANGE 284 miles

PRICE $77,900-$95,450 base price + $1,150 destination charge
Total MSRP as tested $84,690

THE MIDSIZED, five-seat all-electric EQE SUV is quick, quiet, and luxuriously appointed. Distracting controls and spongy-feeling brakes bring down its road-test score, while Mercedes' below-average brand reliability hurts its Overall Score.

The EQE 350 we tested zips off the line and scoots from 0 to 60 mph in an effortless and nearly silent 5.9 seconds. Unfortunately, its 9.6-kW onboard charger makes for slower at-home replenishment than other EVs, and its 170-kW rate at DC fast-charging stations isn't a standout. Driving range is shorter than the similarly priced BMW iX's.

We don't like the spongy brake feel or its unnervingly long pedal travel, which makes it feel like the SUV isn't slowing appropriately. Yet it stopped quickly during our braking tests.

The ride is comfortable the majority of the time, and the suspension does a good job keeping occupants from being jostled. The EQE doesn't mind hustling on a curvy road, either, with quick steering and a responsive chassis.

The front seats are mostly comfortable, although the bottom cushion could use better side bolsters to hold your legs in place. Some of our drivers found that the steering wheel blocks the upper part of the instrument panel display. The rear seat has good headroom and lots of foot space under the front seats.

Most media and climate functions are controlled through the infotainment screen, which is distracting. The finger-sliding actions for volume and cruise control on the steering wheel require extra dexterity while driving.

AEB with pedestrian detection, AEB highway, BSW, and RCTW come standard.

MIDSIZED THREE-ROW SUVs

Mazda CX-90

Fine-Driving SUV With Convoluted Controls

82

OVERALL SCORE

ROAD-TEST SCORE 85

HIGHS Quick acceleration, agile handling, sharp steering, short dry stopping distance

LOWS Quirky controls, unintuitive gear selector, stiff ride with high-end trims' 21-inch tires

POWERTRAIN 280-hp, 3.3-liter turbo 6-cylinder engine; 8-speed automatic transmission; AWD

FUEL 24 mpg on regular

PRICE $39,595-$59,950 base price + $1,375 destination charge
Total MSRP as tested $48,670

THE THREE-ROW CX-90 is Mazda's mostly successful effort to move the brand upscale. It has a wonderful powertrain and excellent handling for the class, but the ride is quite firm and some of the controls are unintuitive.

Most CX-90s come with an all-new 280-hp, turbocharged inline-six engine. Beyond some initial hesitation during rolling stops, the engine propels the SUV down the road with authority, aided by a smooth-shifting eight-speed automatic. The 24 mpg overall it achieved makes it one of the thriftiest of any nonhybrid competitor. (We're also testing the CX-90 plug-in hybrid.)

Mazda's new rear-drive-based platform, with standard all-wheel drive, helps make the CX-90 one of the finest-handling three-row SUVs. But the ride skews firm, with the occasional sharp impact punching through.

The front seats have comfy cushions and just enough lateral support. Small-item storage up front is lacking compared with similar SUVs, with an oddly shallow bin underneath the center armrests. Those in the second row will find a nice place to spend time, while the third-row seat's low perch and tight foot space make it best suited for kids.

The infotainment display screen isn't touch-enabled like in most vehicles, except when using Android Auto or Apple CarPlay on higher trims. And interacting with the controller knob is complicated, with multiple menus and layers to wade through. The electronic gear selector is also frustrating, thanks to its illogical upside-down L-shaped shift pattern.

AEB with pedestrian detection, AEB highway, BSW, and RCTW come standard.

Safety Term Glossary: AEB automatic emergency braking; **BSW** blind spot warning; **LDW** lane departure warning; **LKA** lane keeping assistance; **RCTW** rear cross traffic warning.

Ratings › **Trendy Transport** This month's testing features the flashy new Toyota Prius, super-sensible Subaru Crosstrek, and all-new Mazda CX-90 and Mercedes-Benz EQE SUV.

Make + Model	Overall Score	Survey Results		Road-Test Results												Active Safety Features		
		Predicted reliability	Owner satisfaction	Road-test score	Overall mpg	Range, miles [2]	Seat comfort, front/rear	Usability	Noise	Ride	Fit + finish	Routine handling	Avoidance-maneuver speed, mph	Acceleration, 0-60 mph, sec.	Dry braking, 60-0 mph, ft.	AEB, pedestrian	AEB, highway	BSW/RCTW
COMPACT HYBRIDS																		
✓ **Toyota Prius (AWD)** 2.0H	80	⇈	↑	76	51	570	↑ / ↓					↑	53.5	7.7	131	S	S	S
✓ **Kia Niro** 1.6H	79	↑		83	45	500	↑ / ↑	↑					55.0	8.9	133	S	S	S
✓ **Hyundai Elantra Hybrid** 1.6H	76			85	48	530	/	⇈		↑		↑	54.0	8.7	127	S	O	S
✓ **Toyota Corolla Hybrid** 1.8H	74	↑		75	48	550	/	↑		↑		↑	53.0	10.3	142	S	S	O
SUBCOMPACT SUVs																		
✓ **Subaru Crosstrek** 2.0L	87	⇈	↑	82	29	490	↑ / ↑	↑		↑		↑	56.5	10.1	128	S	S	O
✓ **Honda HR-V** 2.0L	74	⇈	↓	70	27	380	/ ↑	⇈					54.0	11.1	130	S	S	O
✓ **Toyota Corolla Cross** 2.0L	69	↑	↓	68	28	370	/	↑					58.0	9.3	128	S	S	O
✓ **Kia Seltos** 2.0L	68		⇊	73	28	365	/ ↑	⇈	↓	↓		↑	55.0	9.0	128	S	S	O
✓ **Mazda CX-30** 2.5L	68	↑	↓	65	27	340	↑ /				↑	↑	54.0	8.7	133	S	S	S
Chevrolet Trailblazer 1.3T	63		↓	68	27	360	/ ↑	↑					54.0	9.5	133	S	–	O
Volkswagen Taos 1.5T	47	⇊	⇊	75	26	380	↑ / ⇈	↑	↑			↑	53.0	9.4	130	S	S	O
MIDSIZED 3-ROW SUVs																		
✓ **Toyota Highlander Hybrid** 2.5H	85	↑	↑	86	35	590	↑ / ⇈	↑	↑	↑	↑	↑	49.5	8.0	141	S	S	S
✓ **Kia Telluride** 3.8L	84		⇈	92	21	390	↑ / ⇈	↑	⇈	↑	↑		53.5	7.2	127	S	S	S
✓ **Hyundai Palisade** 3.8L	83	↑	↑	85	21	395	↑ / ⇈	↑	⇈	↑	↑		52.5	7.1	132	S	S	S
✓ **Mazda CX-90** 3.3T	82	↑	↓	85	24	435	↑ / ↑	↓	↑	↑	↑	↑	53.0	7.2	128	S	S	S
✓ **Toyota Highlander** 2.4T	79	↑		82	22	400	↑ / ⇈	↑	↑	↑	↑		52.0	7.7	133	S	S	O
✓ **Subaru Ascent** 2.4T	79		↑	90	22	420	↑ / ⇈	⇈	↑	⇈	↑		52.0	8.0	129	S	S	O
✓ **Honda Pilot** 3.5L	77		⇈	85	21	380	↑ / ↑	⇈	↑	↑	↑		51.5	7.7	129	S	S	O
Nissan Pathfinder 3.5L	63	↓	↓	81	21	385	↑ / ⇈	⇈	↑		↑	↑	52.5	7.6	138	S	S	S
Ford Explorer 2.3T	61	↓	↓	74	21	370	↑ / ↑	↑	↑		↑	↑	51.5	7.4	136	S	S	S
Jeep Grand Cherokee L 3.6L	51	↓	↓	71	19	445	↑ / ↑		↑	↑	↑		50.5	8.8	141	S	S	S
LUXURY ELECTRIC SUVs																		
✓ **BMW iX**	83		↑	91	86 [1]	370	↑ / ↑	↓	⇈	⇈	⇈	↑	53.5	4.3	127	S	O	S
✓ **Lexus RZ**	75	↑		70	107 [1]	202	↑ /	↓	⇈	↑	↑	↑	51.0	4.9	138	S	S	S
Mercedes-Benz EQE SUV	55	↓	↑	76	81 [1]	284	⇈ / ↑	↓	⇈	↑	↑	↑	51.5	5.9	124	S	S	S

› Digital and All Access members can find the latest, complete ratings at CR.org/cars. When you're ready to buy, configure the vehicle and find the best price in your area by clicking the green "View Pricing Information" button on the model's dedicated page.

HOW WE TEST: Overall Score combines **road-test results,** survey data for **predicted reliability** and **owner satisfaction,** and **advanced safety,** which includes crash-test results and the availability of crash-prevention features, such as automatic emergency braking, pedestrian detection, blind spot warning, and rear cross traffic warning. A dash (–) means no such safety system is offered; O means that it's optional on at least some trim levels; S means that the feature is standard on all trims. We deduct points if a model's gear selector lacks fail-safes to prevent the vehicle from rolling away.

⇊ ↓ | ↑ ⇈ WORSE – BETTER | ✓ CR RECOMMENDED | CR GREEN CHOICE

[1] Miles-per-gallon equivalent (MPGe). [2] Based on CR's tests.

Index

THIS INDEX LISTS ALL THE ARTICLES PUBLISHED IN THE MAGAZINE OVER THE PAST 12 MONTHS (INCLUDING THIS ISSUE). FOR INDEXES COVERING THE PAST FIVE YEARS, GO TO CR.ORG/5YEARINDEX.

A

Accounts, online, managing ... Jul 23, 38
Aging healthily ... Sep 23, 24
Air fryers, ratings ... Nov/Dec 23, 92
Air purifiers ... Aug 23, 13
Air travel tips ... Oct 23, 40
  airline ratings ... Oct 23, 47
Alcohol ... Nov/Dec 23, 50
  healthy drinking tips ... Nov/Dec 23, 56
Anti-tick strategies ... May/Jun 23, 13
Appliances
  bargains ... Jul 23, 12
  cooking ... Nov/Dec 23, 74

AUTOMOBILE RATINGS

Audi Q4 E-Tron ... Feb 23, 57
BMW i4 ... May/Jun 23, 108
BMW iX ... Jul 23, 61
BMW X1 ... May/Jun 23, 110
Chevrolet Trax ... Nov/Dec 23, 108
Ford F-150 Lightning ... Feb 23, 57
Honda Accord Hybrid ... Sep 23, 61
Honda CR-V ... Mar 23, 57
  Hybrid ... Oct 23, 61
Honda Pilot ... Aug 23, 62
Hyundai Ioniq 6 ... Nov/Dec 23, 110
Kia Niro ... Mar 23, 57
  EV ... Jul 23, 61
Lexus RX ... Feb 23, 58; Jul 23, 62
Lexus RXh ... Jul 23, 62
Lexus RZ ... Nov/Dec 23, 109
Lucid Air ... Mar 23, 58; Aug 23, 61
Maserati Grecale ... Sep 23, 61
Mazda CX-90 ... Jan 24, 58
Mercedes-Benz EQE ... Oct 23, 61
  SUV ... Jan 24, 58
Mercedes-Benz EQS SUV ... Sep 23, 62
Nissan Ariya ... Mar 23, 58
Nissan Z ... Sep 23, 62
Range Rover Sport ... Aug 23, 62
Rivian R1S ... Oct 23, 62
Subaru BRZ ... Feb 23, 58
Subaru Crosstrek ... Jan 24, 57
Subaru Solterra ... Aug 23, 61
Toyota Crown ... Oct 23, 62
Toyota Highlander ... May/Jun 23, 109
Toyota Prius ... Jan 24, 57
Toyota Sequoia ... Jul 23, 62

AUTOMOBILES & AUTO EQUIPMENT

Best & Worst lists 2023 ... Apr 23, 14
BMW 5 Series vs. Genesis G80 ... Feb 23, 15
BMW Z4 vs. Mazda MX-5 Miata ... Aug 23, 13
Brand Report Card ... Apr 23, 12
Buying tips, pricey dealership extras ... Apr 23, 34
Coming in 2023 ... Apr 23, 18
Controls, easiest to use ... May/Jun 23, 107
Crash alerts ... Aug 23, 5
Crash prevention ... Mar 23, 5
Driver assistance systems ... Apr 23, 20
Electric vehicles
  cost savings ... Apr 23, 28
  range ... Apr 23, 97
Infotainment systems ... Aug 23, 54
  brand ratings ... Aug 23, 58
Innovations timeline ... Feb 23, 12
Insurance ... Nov/Dec 23, 100
  provider ratings ... Nov/Dec 23, 106
Lexus NX vs. Mazda CX-5 ... Mar 23, 13
Maintenance and repair costs ... May/Jun 23, 100
Motor oil ... Jan 24, 56
MPG, cars with best ... Nov/Dec 23, 17
New car features ... Feb 23, 50
New cars 2023
  ratings ... Apr 23, 36
  reviews ... Apr 23, 46
Owner satisfaction ... Mar 23, 50
  brand ratings ... Mar 23, 53
Owner's manuals ... Sep 23, 60
Parking technology ... Sep 23, 11
Popular cars to avoid ... Jul 23, 54
Recall FAQ ... Mar 23, 56
Reliability ... Apr 23, 84; Jan 24, 50
  2024 predictions ... Jan 24, 54
  brand comparisons ... Jan 24, 53
  ratings ... Apr 23, 86
Roadside assistance ... Aug 23, 60
Safe model picks ... Oct 23, 55
Safety features ... Oct 23, 54
Shifter tips ... Nov/Dec 23, 107
Subaru Legacy vs. Toyota Crown ... Jan 24, 65
Top Picks for 2023 ... Apr 23, 6
Used cars ... Apr 23, 80; Sep 23, 54
  financing ... Feb 23, 56
Warranties ... Jul 23, 60
Winter preparation ... Oct 23, 60

B–D

Backyard decor & gear ... Jul 23, 40
Banking ... Mar 23, 44
Bathrooms ... Aug 23, 46
  showers and tubs ... Aug 23, 48
    showerheads ... Mar 23, 15; Aug 23, 49
  toilets ... Aug 23, 50
    ratings ... Aug 23, 52
  towels ... Aug 23, 48
Beans ... Jan 24, 16
Blenders ... Aug 23, 11
Blood pressure ... Jan 24, 18
  monitor ratings ... Jan 24, 23
Broadband internet availability ... Feb 23, 5; Nov/Dec 23, 5
Butter ... Feb 23, 16
Buy now, pay later loans ... Mar 23, 5; Mar 23, 12; Sep 23, 5
Cameras ... Nov/Dec 23, 20
  accessories ... Nov/Dec 23, 23
  ratings ... Nov/Dec 23, 25
Candy, 100-calorie portions ... Oct 23, 15
Canned cocktails ... Jul 23, 15
Chocolate, dark, heavy metals in ... Feb 23, 34; May/Jun 23, 5
Cleaning tips ... Aug 23, 16
  laundry stain removal ... Sep 23, 21
Clothing steamers ... Oct 23, 11
Cocktails, canned ... Jul 23, 15
Computers, desktop ... May/Jun 23, 20
  ratings ... May/Jun 23, 25
Consumer Financial Protection Bureau ... Aug 23, 5
Cooking appliances ... Nov/Dec 23, 74
Cooktops, ratings ... Nov/Dec 23, 82
Cookware
  nonstick, PFAS in ... May/Jun 23, 52
  ratings ... May/Jun 23, 58
Coupons & deals ... Feb 23, 42
Credit reports ... Jan 24, 5
Customer service ... Nov/Dec 23, 44
Data privacy ... May/Jun 23, 5; Jan 24, 5
  tax returns ... Nov/Dec 23, 5
Desk chairs ... May/Jun 23, 20
Desktop computers ... May/Jun 23, 20
  ratings ... May/Jun 23, 25
Detergents
  dishwasher ... Oct 23, 21
  laundry, ratings ... Sep 23, 22
Device charging ... Nov/Dec 23, 68
Digital cleanup ... Jul 23, 34
Dishwashers ... Oct 23, 18
  ratings ... May/Jun 23, 37; Oct 23, 22
Drinking water safety ... Jan 24, 24
  filters ... Jan 24, 31
    ratings ... Jan 24, 32
Drugs, prescription, costs ... Aug 23, 40

E–G

E-bikes ... Aug 23, 14
  battery safety ... Mar 23, 5; Sep 23, 5
Electric toothbrush ratings ... Mar 23, 23
Electronics, disposing of ... Jul 23, 34
Elliptical trainers ... Feb 23, 18
  ratings ... Feb 23, 23
Emails, unwanted, managing in Gmail ... Jul 23, 39
Energy level ... Jan 24, 12
Exercise equipment ... Feb 23, 18
  ratings ... Feb 23, 22
Eyeglasses ... Oct 23, 34
  provider ratings ... Oct 23, 39
Fake online reviews ... Aug 23, 12
Fees, unfair ... Jul 23, 5; Oct 23, 5
Food processors
  Breville Sous Chef 16 Pro vs. Cuisinart Pro Custom 11 ... Jan 24, 65
Food safety ... Oct 23, 24
  lettuce ... Aug 23, 15
  seafood ... Jul 23, 24
  timeline ... Oct 23, 12
"Forever chemicals"
  in cookware ... May/Jun 23, 52
  in water ... Jul 23, 5
Frozen pipes, preventing ... Jan 24, 14
Frozen pizza ... Aug 23, 34
  cooking tips ... Aug 23, 37
Furniture tip-over safety ... May/Jun 23, 5; Nov/Dec 23, 5
Gifts for $35 or less ... Nov/Dec 23, 11
Glass cleaners ... Jan 24, 13
Glasses ... Oct 23, 34
  provider ratings ... Oct 23, 39

H–K

Headphones ... May/Jun 23, 78
  ratings ... May/Jun 23, 78
Healthy aging ... Sep 23, 24
Hearing aids ... May/Jun 23, 44
  brand and retailer ratings ... May/Jun 23, 51
  timeline ... May/Jun 23, 12
Heavy metals in dark chocolate ... Feb 23, 34
Home entertainment ... May/Jun 23, 76
Home office ... May/Jun 23, 20
Home safety timeline ... Mar 23, 12
Home security ... Mar 23, 24
Homeowners insurance ... Mar 23, 33; Sep 23, 46
  provider ratings ... Mar 23, 33; Sep 23, 52
Insect repellents ... Sep 23, 16
Insurance
  car ... Nov/Dec 23, 100
    provider ratings ... Nov/Dec 23, 106
  pet ... Jan 24, 40
    provider ratings ... Jan 24, 43
Internet access away from home ... Oct 23, 48
Keeping warm, top picks ... Feb 23, 12
Kitchens ... Nov/Dec 23, 60
Knives, steak ... Oct 23, 14

L–P

Laundry detergents ... Sep 23, 18
  ratings ... Sep 23, 22
Lawn mowers ... May/Jun 23, 15
Lighting ... Jan 24, 34
  timeline ... Jan 24, 12
Machine-washable rugs ... May/Jun 23, 18
Mattresses ... Feb 23, 26
  ratings ... Feb 23, 32
  shopping tips ... Nov/Dec 23, 16
Microwaves, ratings ... Nov/Dec 23, 88
Milk ... Sep 23, 40
  timeline ... Sep 23, 12
Money saving on prescription drugs ... Aug 23, 40
Olive oil ... Jan 24, 44
  ratings ... Jan 24, 47
Online reviews, fake ... Aug 23, 12
Online shopping, product safety ... Oct 23, 5
Oscillating multi-tools ... Nov/Dec 23, 18
Ovens, wall, ratings ... Nov/Dec 23, 86
Paper shredders ... Jan 24, 15
Pasta sauces ... Mar 23, 34
  ratings ... Mar 23, 38
Peer-to-peer payment apps ... Jul 23, 5
Pet insurance ... Jan 24, 40
  provider ratings ... Jan 24, 43
Pillows ... Feb 23, 29
  ratings ... Feb 23, 33
Pizza, frozen ... Aug 23, 34
  cooking tips ... Aug 23, 37
Plant milks ... Sep 23, 40
Popcorn, bagged ... Sep 23, 14
Prescription drugs, costs ... Aug 23, 40
Pressure washers ... Jul 23, 16
Printers ... May/Jun 23, 20; Sep 23, 15
  ratings ... May/Jun 23, 26

R–S

Ranges ... Nov/Dec 23, 76
  ratings ... Nov/Dec 23, 76; Feb 23, 14
Red No. 3 dye ... Feb 23, 5
Right to repair ... Aug 23, 5
Rugs, machine-washable ... May/Jun 23, 18
Saving money on prescription drugs ... Aug 23, 40
Scams ... Aug 23, 24
  security tips ... Aug 23, 29
Seafood
  safety ... Jul 23, 24
  timeline ... Jul 23, 12
Selling used items ... Sep 23, 34
Shopping tips
  coupons & deals ... Feb 23, 42
  mattresses ... Nov/Dec 23, 16
  online, product safety ... Oct 23, 5
Showers ... Aug 23, 48
  showerheads ... Mar 23, 15; Aug 23, 49
Shredders ... Jan 24, 15
Sleep ... Feb 23, 24
  cooling ... Jul 23, 11
Smart speakers ... May/Jun 23, 80; Jan 24, 11
  ratings ... May/Jun 23, 80
Smartphones
  disposing of ... Jul 23, 34
  hidden features ... Oct 23, 12
  keeping charged ... Nov/Dec 23, 68
  protecting from damage ... Feb 23, 15
Smartwatches ... Aug 23, 18
  apps ... Aug 23, 21
  ratings ... Aug 23, 22
Soundbars ... May/Jun 23, 84
  ratings ... May/Jun 23, 84
Sparkling water ... Oct 23, 16
Speakers
  smart ... May/Jun 23, 80
    ratings ... May/Jun 23, 80
  wireless ... May/Jun 23, 82
    ratings ... May/Jun 23, 82
Steak knives ... Oct 23, 14
Steam mops ... Nov/Dec 23, 14
Steamers, clothing ... Oct 23, 11
Step count ... Sep 23, 12
Streaming
  devices ... May/Jun 23, 98
    ratings ... May/Jun 23, 98
Stroller safety ... Feb 23, 5
Summer gear ... May/Jun 23, 11
Sunscreens ... Jul 23, 18
  ratings ... Jul 23, 21
Sustainability at home ... May/Jun 23, 28

T–W

Tax return privacy ... Nov/Dec 23, 5
Tick safety ... May/Jun 23, 13
Ticket sale junk fees ... Sep 23, 5
Toaster ovens, ratings ... Nov/Dec 23, 94
Toasters, ratings ... Nov/Dec 23, 96
Toilets ... Aug 23, 50
  ratings ... Aug 23, 52
Tooth care ... Mar 23, 18
Toothbrushes, electric, ratings ... Mar 23, 23
Top product picks ... Nov/Dec 23, 28
  timeline ... Nov/Dec 23, 14
Towels, bathroom ... Aug 23, 48
Toxin testers ... Mar 23, 40
Trader Joe's snacks ... Mar 23, 14
Travel
  airline ratings ... Oct 23, 47
  bargains ... May/Jun 23, 60
  credit cards ... May/Jun 23, 63
  flying tips ... Oct 23, 40
Treadmills ... Feb 23, 18
  ratings ... Feb 23, 22
Turkey ... Nov/Dec 23, 15
TVs ... May/Jun 23, 86
  picture settings ... Feb 23, 11
  ratings ... May/Jun 23, 86
Walking, step count ... Sep 23, 12
Wall ovens, ratings ... Nov/Dec 23, 86
Warranties ... Jul 23, 48
Washer ratings ... May/Jun 23, 40
Water
  filters ... Jan 24, 31
    ratings ... Jan 24, 32
  "forever chemicals" in ... Jul 23, 5
  safety ... Jan 24, 24
  sparkling ... Oct 23, 16
Water beads ... Jan 24, 5
Wireless speakers ... May/Jun 23, 82

The Better Deal

Many of the products we test at CR earn high ratings for their impressive performance—but some are also a really great value. They have most (if not all) of the attributes of other top-rated products at a much lower price. Check out the deals we found for you this month.

SEDANS

2024 TOYOTA CROWN
$40,050-$53,070 **78**

THE BETTER DEAL

2024 SUBARU LEGACY
$24,395-$37,695 **77**

THE LOWDOWN

THE CROWN (back on the U.S. market for the first time since 1972) offers a fresh design that's part sedan, part SUV. It's offered only as a hybrid with standard all-wheel drive, and has an elevated seat height that might appeal to SUV fans. But it isn't as roomy as you might expect. For much less money, you could get the well-equipped Legacy, a gas-only sedan with a four-cylinder engine and all-wheel drive. While it gets only 28 mpg to the Crown's 42 mpg, it offers an exceptionally smooth ride that rivals that of luxury models, more cargo space than the Crown, and more room for the driver.

FOOD PROCESSORS

BREVILLE SOUS CHEF 16 PRO BFP800XL
$450 **73**

CUISINART PRO CUSTOM 11 DLC-8S
$170 **77**

THE BETTER DEAL

THE LOWDOWN

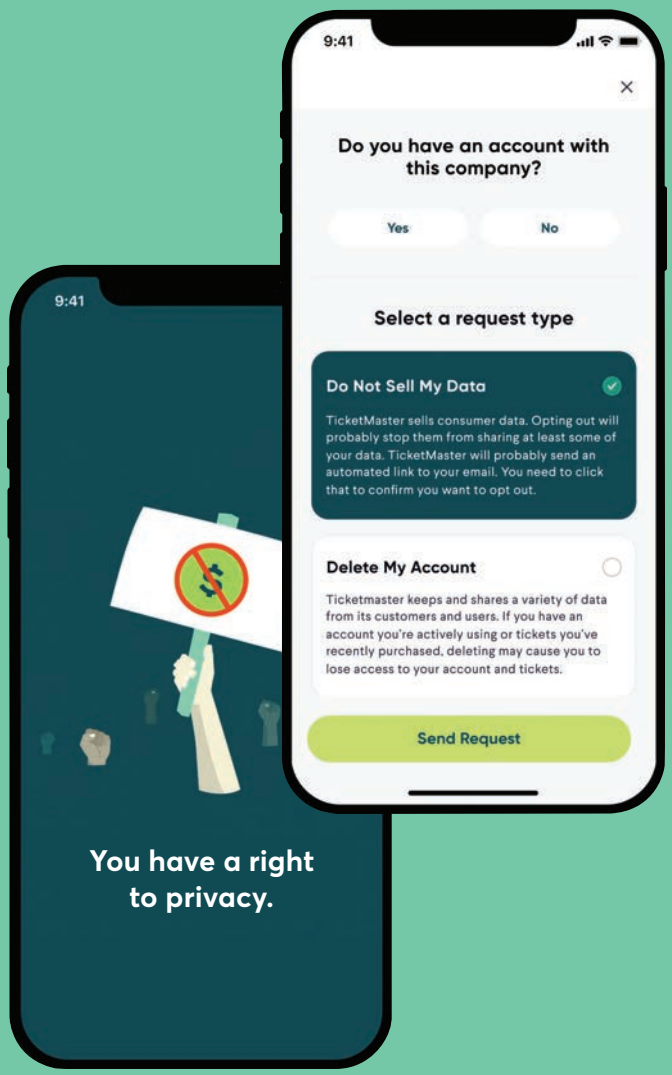
THESE TWO FOOD processors sit at the top of CR's ratings, and both aced our slicing, shredding, and chopping tests. The Breville Sous Chef is powerful and roomy, with a 16-cup capacity. But it also weighs in at a hefty 19 pounds—not so easy to move onto your counter. For $280 less, the top-rated Cuisinart offers superior overall performance, including better cheese-grating and quieter operation. At 12 pounds, it's also much easier to lift.

PERMISSION SLIP

By Consumer Reports

Companies collect and sell your personal data.

Our new app makes them stop.


9:41
Do you have an account with this company?
Yes
No
Select a request type
Do Not Sell My Data
TicketMaster sells consumer data. Opting out will probably stop them from sharing at least some of your data. TicketMaster will probably send an automated link to your email. You need to click that to confirm you want to opt out.
Delete My Account
Ticketmaster keeps and shares a variety of data from its customers and users. If you have an account you're actively using or tickets you've recently purchased, deleting may cause you to lose access to your account and tickets.
Send Request
9:41
You have a right to privacy.

Download Permission Slip

Download on the App Store

GET IT ON Google Play

CRM41C4N